DOCUMENT RESUME

ED 302 696 CE 051 722

TITLE Corrections Officer Physical Abilities Report. Standards and Training for Corrections Program.
INSTITUTION California State Board of Corrections, Sacramento.
PUB DATE 87
NOTE 151p.; For related documents, see CE 051 717-725, 729-735, and 739-744. For appendix F, see CE 051 725.
PUB TYPE Reports - Research/Technical (143) -- Guides - Non-Classroom Use (055)

EDRS PRICE MF01/PC07 Plus Postage.
DESCRIPTORS Adult Education; *Correctional Rehabilitation; Delinquent Rehabilitation; Employment Practices; *Employment Qualifications; *Entry Workers; Evaluation Criteria; Job Skills; *Personnel Selection; *Physical Fitness; Postsecondary Education; State Standards; State Surveys; Statewide Planning
IDENTIFIERS *California; *Correctional Officers

ABSTRACT

A study examined the physical ability requirements for entry-level corrections officers in the California. The study, which was undertaken at the request of the California Board of Corrections, had the following objectives: statewide job analysis of the requirements of three entry-level positions in county agencies--corrections officer, probation officer, and juvenile counselor; development of selection standards and validation of entry-level selection procedures for these positions, and development of training standards and curricula for these positions. On-site observations and interviews were conducted with 578 incumbents and 205 supervisors at 20 agencies representative of the state with respect to geographic location. It was determined that performance standards should be developed for 11 physically demanding core tasks. These standards clearly define the minimum level of physical ability needed by entry-level corrections officers. (Appendices include evidence for physical abilities from critical incidents, telephone interviews, and surveys; and a sample medical screening form.) (YLB)

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STANDARDS AND TRAINING
FOR CORRECTIONS PROGRAM

STC

BOARD OF CORRECTIONS

PHYSICAL ABILITIES REPORT

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ACKNOWLEDGEMENTS

For their expert consultation on physical abilities issues arising during the job analysis phase, their contributions to our evaluation of alternative methods for addressing physical abilities standards, and their assistance to us in identifying relevant literature and examples of other physical conditioning and testing programs, we are grateful to:

Joyce C. Hogan, Ph.D.

Raymond Mendel, Ph.D.

John W. Kohls, Ph.D.

For their valuable guidance and essential contributions in designing the fundamental framework for the physical conditioning program recommended in this report, we wish to extend special recognition and thanks to the three exercise physiologists who served as expert consultants to us:

Glenn P. Town, Ph.D.

John M. Kelly, Ph.D.

William D. Gilman, Ph.D.

For their wise counsel and unfailing support throughout the full course of our work on this project, we extend our special thanks to the other staff of Personnel Decisions, Inc. and Personnel Decisions Research Institute, particularly:

Lowell W. Hellervik, Ph.D.

Marvin D. Dunnette, Ph.D.

Janis S. Houston, M.A.

Finally, we wish to extend our sincere appreciation to the many project coordinators and position incumbents and supervisors from participating agencies who directly participated in the research for this project, and to the STC staff who facilitated various phases of the process. For his support through the final stages of this project, we are especially grateful to Charles W. Page at STC.

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CALIFORNIA BOARD OF CORRECTIONS
Standards and Training for Corrections Program

Development and Validation Report for:
RECOMMENDED PHYSICAL ABILITIES STANDARDS
FOR CORRECTIONS OFFICERS

I. INTRODUCTION

Over the period 1982-1985, Personnel Decisions, Inc. conducted a major research program for the California Board of Corrections, Standards and Training for Corrections (STC) program. The research program had three primary objectives:

1. State-wide job analysis of the requirements of three entry-level positions in county agencies: corrections officer, probation officer, and juvenile counselor positions.

2. Development of selection standards and validation of entry-level selection procedures for these positions.

3. Development of training standards and curricula for these positions.

As one part of the overall research program, evidence was collected concerning the physical demands of the positions and recommendations were to be provided regarding implementation of entry-level physical abilities standards. The present report deals with that part of the overall research program, as it applies to the corrections officer position.

For the corrections officer (CO) position in agencies participating in the STC program, we have concluded that entry-level physical abilities standards are appropriate, and have recommended that these standards be addressed through (1) medical screening at the selection stage, and (2) physical conditioning and testing at the training stage. We also have recommended a particular program which could be used to implement physical conditioning and testing at the training stage.

The program we have recommended was designed specifically for this purpose by an expert panel of exercise physiologists who served as consultants on the project. It is based upon our extensive job analysis data regarding the requirements of the CO position, plus evidence on physical conditioning and testing programs from previous research and experience. In technical terms, the program is best described as having been developed through a content validation approach.

This report serves to:

- summarize the evidence which led to our conclusions and recommendations regarding the CO physical abilities standards,

- present the specific physical conditioning and testing program we have recommended, and

- document the job-relatedness of that program.

We have aimed to write this report in a non-technical manner, to make it interpretable and useful to all interested parties. If any technical questions should arise which are not fully addressed by this report, we will be pleased to address them. They should be directed to:

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(Telephone: 612-339-0927)

Questions concerning the implementation of our recommendations should be directed to the California Board of Corrections, Standards and Training for Corrections (STC) Program.

II. OVERVIEW OF THE RESEARCH EVIDENCE AND APPROACH

Our conclusions and recommendations regarding the entry-level physical abilities standards for the corrections officer position are based upon:

- Evidence from the present study establishing the nature and importance of CO physical performance requirements and allowing definition of state-wide physical performance standards for the position;
- Evidence from previous research, and analyses by an expert panel of exercise physiologists*, supporting the relative merits of using basic training rather than selection testing to implement the corrections officer physical performance standards at the entry level; and,
- Recommendations from the expert panel of exercise physiologists, and evidence from the broader physical abilities research and training literature, as to particular types of physical conditioning exercises and tests that would best serve to assure that new corrections officers are able to meet or exceed minimum physical performance standards.

The evidence from the present (PDI/STC) study which served to establish the nature and importance of the corrections officer physical performance requirements, and to allow the definition of the statewide physical performance standards, is presented in Chapters III and IV of this report. It includes results from:

- job analysis questionnaires completed by hundreds of incumbents and supervisors across the state,
- critical incidents provided by an experienced and representative sample of CO supervisors,
- in-depth task analyses by a panel of job experts,
- specialized telephone interviews with job experts from many different facilities, and
- a specialized written survey through which input on proposed physical performance standards was sought from incumbents and supervisors from all participating agencies in the STC program.

The resultant final set of corrections officer physical performance standards is presented at the conclusion of Chapter IV.

Chapter V summarizes the evidence and analyses which led to our conclusion that basic training is superior to selection testing as a method for introducing statewide entry-level physical ability standards for corrections officers. The analyses include evaluations of expected validity, impact/fairness for protected groups, and overall utility for participating agencies. A training approach, in contrast to a selection testing approach, is shown to be expected to have:

---

*The panel consisted of three Ph.D.-level exercise physiologists with extensive applied experience and expertise in designing, conducting, and evaluating physical conditioning and fitness testing programs (see Chapter V and Appendix D for more details).

- equal effectiveness in assuring that new COs are able to meet the physical demands of the job,
- less adverse impact against women and minorities, and,
- greater overall utility for participating agencies.

Chapter V also addresses the importance of conducting medical examinations as a prerequisite to CO job placement, and provides recommendations as to how such examinations would be conducted and used. (Appendix E provides a sample medical screening form and guidelines for physicians.)

Chapter VI describes the particular physical abilities training program which we have recommended to the Board of Corrections as the method of implementing entry-level physical abilities standards for corrections officers. Chapter VI also outlines how the program was developed and summarizes the evidence documenting its job-relatedness.

As mentioned previously, an expert panel of exercise physiologists served as consultants to us on the development of the recommended physical abilities training program. They identified for us both the underlying physical capacities which the training should address, and the specific types of physical conditioning exercises and tests which should be used, to achieve maximum job relatedness and effectiveness for assuring the CO trainees are able to meet the physical demands of the job. We, in turn, evaluated their recommendations against evidence in the broader literature on physical abilities testing and training, and then finalized the program design and prepared all materials necessary for its implementation as part of the Core Training Course for Corrections Officers. (Appendix F provides a full copy of the instructor's guide for the program.)

Chapter VII outlines our final conclusions and recommendations to the California Board of Corrections on the subject of the physical conditioning and testing program. Our major conclusion is that all available evidence indicates that this program will prove to be a valid, fair, and administratively effective means of implementing corrections officer physical abilities standards at the entry level -- assuring that new COs are able to meet the physical demands of the job. Our major recommendation is that it be implemented, as designed, as an integral part of the Core Training Course for Corrections Officers.

III. NATURE AND IMPORTANCE OF CO PHYSICAL REQUIREMENTS

Are the physical demands of the CO position sufficient to warrant the establishment of statewide physical ability standards?

The initial evidence providing a "yes" answer to this question and defining the nature of those demands came from the results of the broad-based job analysis questionnaires completed, as a part of the general job analysis phase of our research program, by hundreds of CO incumbents and supervisors from facilities across the state. The first part of this chapter summarizes the questionnaire methods and the results relevant to physical abilities; for more details, see the complete job analysis technical report (Grabow, Houston, & Sevy, 1983).

Elaboration on the nature of the physical demands was then obtained through review of critical incidents, an analysis of the physically demanding tasks by a panel of job experts, and a telephone survey of job experts at many different facilities across the state.

The primary outcome of these steps was a set of preliminary physical performance standards expected to have statewide applicability for the physically demanding core tasks of the CO position.

This chapter of the report summarizes the evidence derived from each step in the development of the preliminary physical performance standards. The next chapter (Chapter IV) describes the statewide verification survey which subsequently was used to finalize those physical performance standards.

JOB ANALYSIS QUESTIONNAIRE RESULTS

The broad-based job analysis questionnaire used in the general job analysis phase of our research program provided a thorough overall perspective on the statewide requirements of the CO position, allowing definition of the "core job" as it exists statewide. The core job consists of the job elements which are common to CO jobs across agencies and facilities. It identifies the common denominators on which statewide standards can appropriately be based.

The questionnaire yielded incumbent and supervisor ratings of the frequency and importance of the full range of CO tasks, incumbent and supervisor ratings of the usefulness of relevant knowledges, skills, abilities and other characteristics, and supervisor judgments as to when those characteristics should be developed (before hire versus after hire). Those results, obtained statewide, provided a solid basis for evaluating both the absolute importance of the physical requirements of the position and their importance relative to other requirements.

Questionnaire Development

The CO job analysis questionnaire was developed based on:

- position descriptions, training and orientation manuals, performance evaluation forms, policy and procedure manuals and existing job analysis reports from over 30 agencies;
- relevant findings reported in the corrections, criminal justice, psychology, and sociology literature; and,
- on site observations and interviews with 75 incumbents and 21 supervisors at facilities in eight agencies representative of the state with respect to geographical location, size, and security level.

Questionnaire Completion

The job analysis questionnaires were completed by 578 incumbents and 205 supervisors from facilities in 20 different agencies. The agencies were representative in size and geographical location of the state as a whole, and the respondents came from all shifts and facilities of all security levels The respondents were chosen by a random sampling procedure modified to include enough females and minorities to permit adequate representation of all groups. All of the respondents had at least six months of experience on the job, with the average experience being 5 years for incumbents, and 9 years for supervisors (4 years as supervisor, 5 years as incumbent). The questionnaire responses of these 783 incumbents and supervisors were used to define the statewide "core" CO position. (See Grabow, Houston, and Sevy, 1983 for details of the job analysis).

Rated Frequency and Importance of Physically Demanding Core Tasks

Table 1 shows the statewide mean frequency and importance ratings obtained for the physically demanding core tasks of the CO job. They range in nature from routine, high frequency tasks which demand relatively low levels of physical fitness (e.g., walking and standing, searching) to relatively rare but important tasks which pose higher level physical demands (e.g., running to the scene of an emergency, defending oneself against attack). The average importance of these tasks ranges from moderately low to moderately high; the majority have at least medium importance.

Rated Usefulness of Physical Abilities

Table 2 shows the statewide mean usefulness ratings which supervisors and incumbents provided for the individual physical skills and abilities addressed through the job analysis questionnaire. As can be seen, almost all of those skills and abilities were rated from very useful to extremely useful by both supervisors and incumbents.

Table 3 shows how the physical abilities as a whole compare to other broad groupings of CO worker characteristics in terms of their rated overall usefulness by supervisors. The characteristics are grouped according to whether they were judged by supervisors as needing to be developed before hire versus after hire; 14 are classified as "before-hire", 10 others are classified as "after-hire". As can be seen, physical abilities as a whole:

- are one of the 14 types of characteristics which supervisors judged as needing to be developed mostly before hire (making them an appropriate subject for selection and/or pre placement training standards),
- are relatively less useful than many of the other characteristics (ranking 12th of 14 in the set of "before-hire" characteristics, and 17th of 24 overall), but
- continue to show a high level of absolute importance, a "very useful" overall rating (a statewide mean rating of 3.17 on a 4-point scale).

The before-hire nature of the physical abilities plus their high absolute importance indicates that physical abilities standards are appropriate in CO selection and/or pre placement training. Their lower relative importance indicates, however, that physical abilities standards are not likely to be as valuable as standards for other characteristics, and suggests that physical abilities standards are perhaps best applied after such other standards in any overall CO selection and training process.

Further support for the appropriateness of physical abilities standards in CO selection and/or pre-placement training comes from the high relative usefulness of the physically demanding skills which COs need to develop after hire. As also can be seen from Table 3, three skills with a physically demanding component rank 1st, 2nd, and 5th in the set of 10 "after-hire" characteristics. Those skills are, respectively: searching (mean usefulness rating of 3.47 on the 4 point scale), first aid (mean of 3.44), and self defense and physical restraint of others (mean of 3.38).

Text continues on Page 14.

TABLE 1

Statewide Frequency and Importance Ratings For Physically Demanding CO Core Tasks

Frequency rated by incumbents on a 0 - 8 scale, where:

0 - Never, not part of my job
1 - Once or twice a year or less
2 - More often than twice a year, but less than once a month
3 - About once a month
4 - Two or three times a month
5 - About once a week
6 - Several times a week
7 - About once a day
8 - More than once a day

Importance rated by supervisors on a 0 - 5 scale, where:

0 - Not part of the job
1 - Low
2 - Moderately low
3 - Medium
4 - Moderately high
5 - High

Core Tasks from the "Physically Demanding Tasks" Chapter of the Job Analysis Questionnaire		Mean Frequency	Mean Importance
142.	Pursue inmates on foot (running)	.7	2.3
143.	Walk or stand for long periods of time	6.7	3.2
144.	Run to the scene of a disturbance or emergency.	3.4	3.4
145.	Operate difficult-to-operate gates, doors, or locks manually (for example, when electronic or mechanical mechanisms fail)	2.9	2.8
146.	Physically subdue or restrain a violent inmate by yourself	1.8	2.8
147.	Physically subdue or restrain a violent inmate with the help of another officer	2.9	3.7
148.	Physically separate two fighting inmates by yourself	1.2	2.5
149.	Physically separate two fighting inmates with the help of another officer	2.0	3.5
150.	Defend yourself against an inmate armed with a weapon, disarm and subdue inmate	.6	3.2
151.	Search areas for contraband that are not easily accessible (for example, under beds, in, behind, and around large equipment, vehicles)	4.0	3.6

TABLE 1 (cont.)

Core Tasks from the "Physically Demanding Tasks" Section of the JAO (continued)	Mean Frequency	Mean Importance
152. Carry heavy objects (for example, disabled or unconscious inmate or piece of equipment)......	2.1	2.5
153. Lift heavy objects (for example, disabled or unconscious inmate or piece of equipment)......	2.2	2.5
154. Drag heavy objects (for example, disabled or unconscious inmate or piece of equipment)......	2.0	2.6
155. Push hard to-move objects by hand (for example, piece of equipment)..........................	1.8	2.0
156. Pull yourself up over obstacles................	1.0	1.8
Other Relevant Core Tasks*		
24. Escort inmates individually or in groups to and from locations within facility (for example, to classrooms or work details or infirmary or interview, visiting, or phone rooms or from holding cell to assigned cell/dorm)...............	6.3	2.7
27. Apply appropriate restraints for transportation, such as handcuffs, leg irons, travel chains......................................	4.2	3.3
28. Transport inmates individually or in groups to and from locations outside the facility (for example, to other facilities, law enforcement agencies, hospitals, courts, airports).........	3.1	2.7
30. Guard inmates outside jail (for example, in hospitals, at funerals, at court).............	2.0	2.2
71. Lock and unlock cells/dormitories and other gates/doors within facility..................	7.2	3.5
72. Operate main gate(s) leading into facility.....	5.1	2.8
75. Make security rounds/checks of inmates.........	7.1	4.0
76. Conduct security checks of cells/dorms, cell fixtures, bars, locks, windows, doors, kitchen equipment, etc.............................	6.7	3.9
77. Conduct shakedown of cells/dorms and their contents......................................	4.2	3.7

TABLE 1 (cont.)

Other Relevant Core Tasks* (continued)	Mean Frequency	Mean Importance
78. Check/search areas accessible to inmates (for example, dayrooms, kitchen, library, visiting rooms, mess hall, recreation areas) for contraband, weapons, or other evidence or unauthorized or illegal activities	5.4	3.7
79. Conduct pat-search of inmates	6.5	3.8
80. Conduct strip-search of inmates	4.8	3.4
81. Patrol areas within facility other than housing (for example, halls)	6.4	3.3
83. Investigate disturbances or suspicious activities	6.0	4.1
114. Monitor and intervene in disputes between inmates (before a fight occurs)	4.9	4.1
115. Break up "horseplay"	5.0	3.7
168. Apply CPR	.7	3.2
169. Apply first aid other than CPR	1.7	3.3
177. Assist in search for missing/escaped inmates, inside or outside of the facility	1.1	3.1
178. Extinguish or help extinguish fires	1.1	3.6
179. Evacuate inmates from area or facility (for example, because of fire)	.8	3.7

---

*Identified through supervisor ratings of the importance of physical abilities to the performance of sets of tasks. Tasks listed are ones from sets for which physical abilities received mean importance ratings in the High to Very High range (i.e, mean ratings of 4.0 or above).

TABLE 2

Statewide Usefulness Ratings for CO Physical Abilities and Skills with a Physically Demanding Component

Usefulness rated on a scale of 0 - 4, where:
0 = Not useful
1 = Slightly useful
2 = Moderately useful
3 = Very useful
4 = Extremely useful

	Mean Usefulness	
Skills	**Incumbents**	**Supervisors**
46. Skill in conducting pat-searches	3.6	3.2
47. Skill in conducting strip-searches	3.5	3.1
48. Skill in searching cells/dorms, vehicles, and other areas for contraband, weapons, etc	3.5	3.1
50. Skill in applying self-defense techniques	3.4	3.0
51. Skill in applying basic first aid	3.3	3.1
52. Skill in applying CPR	3.2	3.1
53. Skill in using firearms	2.5	2.1
54. Skill in driving automobiles	2.7	2.5
55. Skill in driving vans, trucks, buses	2.3	2.2
Abilities		
67. Ability to apply the appropriate "use of force"	3.4	3.1
68. Upper body strength (arms, shoulders, back) to be able to subdue an inmate or drag an unconscious inmate, or operate difficult-to-operate gates and locks manually	3.2	2.9
69. Leg strength to be able to give chase or scale obstacles during an escape attempt, or to move quickly on foot to the scene of a disturbance, etc	3.0	2.8

TABLE 2 (cont.)

Abilities (continued)	Mean Usefulness Incumbents	 Supervisors
70. Whole body coordination to be able to run or subdue an inmate	3.1	2.9
71. Manual dexterity to be able to operate control switches for locks, lights, etc., or to manually operate locks	3.2	2.9
72. Eye/hand coordination/steadiness to be able to operate firearms, perform fingerprinting, etc.	3.2	2.9
73. Physical endurance or stamina to be able to be on one's feet, walking, for eight hours, or for giving chase for over ten minutes	3.2	2.9
74. Physical agility or flexibility to be able to search hard-to-access places, give chase, or subdue a violent inmate	3.2	2.9

TABLE 3
Overall Usefulness of Physical Abilities Relative To Other Broad Types of CO Worker Characteristics

	"Before-Hire" Characteristics	Supervisor Mean Usefulness Rating
1.	Stress Tolerance	3.65
2.	Motivation/Dependability	3.59
3.	Reading	3.53
4.	Oral Communication	3.51
5.	Written Communication	3.49
6.	Dominance/Self-Esteem	3.44
7.	Social Skills	3.42
8.	Flexibility	3.38
9.	Non-Autonomy	3.27
10.	Quantitative Skills	3.24
11.	Tolerance of Negative Aspects	3.23
12.	Physical Abilities	3.17
13.	Vision & Hearing	3.14
14.	Driving	2.61
	"After-Hire" Characteristics	
1.	Searching	3.47
2.	First Aid	3.44
3.	Facility-Specific Knowledge	3.41
4.	Observational Acuity	3.39
5.	Self-defense and Physical Restraint of Others	3.38
6.	Operating Communications Equipment	3.14
7.	"Street" Knowledge	3.06
8.	Knowledge of the Legal System	2.79
9.	Psychological Training	2.47
10.	Using Firearms	2.33

CRITICAL INCIDENTS

Critical incidents are concrete examples of behavior that have been observed occurring on the job. They provide a valuable basis for development of job performance rating scales by recounting actual scenarios ("snapshots") of effective, adequate, and ineffective job performance. They also lend richness to job analysis results.

Critical incidents of CO performance were collected as a part of our major research program primarily to facilitate our definition of different levels of CO effectiveness on job performance rating scales. We also used them to give us a richer understanding of the physical demands of the job; it is that use of the critical incidents which is of interest to us here.

The incidents were collected in half-day sessions with 34 CO supervisors from five representative agencies. These supervisors were selected by the Project Coordinators in their agencies on the basis of their knowledge of the CO job, their experience in observing and evaluating COs on the job (at least two years of CO supervisory experience was required), and their insightfulness and ability to express themselves. During the half-day sessions, incidents were collected for all major task categories of the CO job analysis, including the physically demanding task category. Each supervisor contributed 10 to 15 incidents which, after editing for duplications, produced a total of 343 usable incidents.

A second sample of 35 experienced CO supervisors, from 9 representative agencies, then was called upon to review and rate the incidents. Because of the large number of incidents in the total set, they were divided up so that each was rated by approximately half of the supervisors. The ratings involved identifying both the job performance category and the degree of effectiveness represented by each incident.

To help get a richer description of the physical demands of the CO job, PDI researchers reviewed the critical incidents, selecting all incidents in which physical abilities seemed to play a role. Of the total set of 343 incidents, 32 (or approximately 10%) were identified as having some relevance to physical abilities.

A complete list of the 32 incidents is given in Appendix A, Part 1. The appendix also gives the average supervisor ratings of the job performance category and effectiveness level represented by each incident. Examining how the incidents were rated indicates that:

- Most (25 of the 32) were identified as representing either "Use of Force/Restraints" or "Handling Emergencies/Crises".
- The effectiveness levels represented by the incidents cover the full range from low to high.

Table 4 provides examples of incidents at various effectiveness levels from both of the major categories.

TABLE 4
Examples of Critical Incidents Involving Physical Abilities

From the "Use of Force/Restraint" Category

Superior: When called to assist with subduing a man under the influence of PCP, this CO thought to bring extra cuffs and a stokes basket to the scene. He then assisted with cuffing the individual into the basket.

Effective: When this CO encountered an aggressive inmate in inmate reception, he used the proper restraint (rear wrist lock) and subdued the inmate.

Marginal: When this CO was confronted with a violently angry inmate who had been told that he was being moved to a maximum security facility, he applied the restraint gear himself, even though other staff were available.

Ineffective (insufficient force): When this CO was assigned to hold an inmate's arm and hand so that another CO could apply handcuffs, he loosened his grip for a moment. The inmate pulled free, and injured three COs before being subdued again.

Ineffective (excessive force): During a routine booking, this CO subdued a hostile inmate by striking him in the solar plexus and repeated blows to the head, even after he was subdued.

From the "Handling Emergencies/Crises" Category

Superior: While making a routine module check, this CO spotted an ace bandage tied to the upper bars of an isolation cell. He went to the cell immediately and found the inmate hanging from the bars. He then called for help and held the inmate's weight until assistance arrived.

Effective: When an inmate who was in possession of contraband ran off after being directed to stop, this CO gave chase and radioed for assistance. He relayed detailed information, and continued to update the location as the inmate ran through the camp, making it possible for assistance to arrive quickly.

Marginal: When this CO was called to the housing unit to break up a fight, he ran, then slipped and fell on the wet cement floor.

Ineffective (failing to provide assistance): When the requested help arrived to assist this CO break up a gang fight in a 20-man cell, he left the scene.

Ineffective (acting alone inappropriately): This CO was supervising a module when a fight broke out. Contrary to procedure, he failed to notify control, and attempted to break up the fight without assistance, jeopardizing his security and that of the facility.

Review of the contents of the 32 incidents in Appendix A suggests that degree of physical strength is largely irrelevant to CO effectiveness. Insufficient strength does not figure prominently as a cause of failure, nor does great strength figure prominently as a cause of superior performance. Indeed, where use of a high degree of strength is cited, it is most often in the context of ineffective incidents involving excessive use of force or failure to request appropriate assistance.

The picture is similar for other "pure" physical abilities factors such as running speed, stamina, and flexibility. Overall, the incidents suggest that the levels of physical abilities required for effective CO performance are relatively low ones. and that levels of physical ability beyond those required minimums offer little, if any, real practical advantage.

Rather, the content review suggests that the key determinants of effectiveness in these incidents are factors such as judgment in anticipating and acting to minimize physical conflict, willingness to seek and provide assistance, and skillfulness in applying specific restraint, self defense, and first aid techniques.

These impressions can be supported by examining the performance rating scales which ultimately were used in the larger research study for evaluating COs' effectiveness in use of force/restraint and handling emergencies/crises (see Appendix A, Part 3). On the scale for "Use of Force and Restraints", using the minimum force required and using good foresight and skillful self-defense are anchors for "excellent" performance; while using excess force and working without assistance describe the "needs improvement" end. On the scale for "Handling Emergencies/Crises", remaining calm, sounding the alarm, and being skillful in administering CPR and other first aid techniques are anchors for "excellent" performance; while panicking and failing to request assistance anchor the low end of the scale.

Thus, in addition to providing a richer picture of the physical demands of the CO position, the overall indications from the critical incidents fit well with the results which emerged from the physical ability usefulness ratings from the job analysis questionnaire. These are the overall indications that:

- other characteristics, such as judgment, stress tolerance, and communications, are relatively more important than physical abilities in determining overall CO effectiveness, but
- certain minimum levels of physical abilities nevertheless appear critical, especially as they relate to the ability to become skillful in application of restraint, self defense, and first aid techniques.

TASK ANALYSIS WORKSHOPS

Further information on the nature of the physically demanding CO tasks was obtained through a supplemental analysis provided by the panel of CO job experts who had been assembled to serve as the primary job experts on the training phase of the larger research program. The panel was comprised of CO job experts from eight representative agencies. All had been identified by the Project Coordinators in their agencies as having both a thorough understanding of the CO job and the ability to communicate that understanding.

The panel was to be large enough to allow for diversity and representativeness, but small enough to allow thorough discussion of the task requirements. Thus, it was ideally suited to provide us with a more in-depth understanding of the physically demanding CO tasks. Toward this end, the panel met for a full day to discuss and clarify what was involved in each of the major physically demanding core tasks. For each task, they addressed questions such as:

- How much discretion does a CO have in performing this task? Are there less physically demanding ways of accomplishing the task objectives?
- How large are the objects or persons that the CO may be required to move, restrain, etc.? What degree and type of resistance does the task environment present (e.g., violent resistance, stairs to be climbed)?
- How long must the CO persist at this task? How quickly must it be performed?
- What is the typical size and distance of objects that must be seen? What is the typical volume, distance, and background noise for things that must be heard? [These were included because this supplemental physical abilities task analysis also was used to provide additional information on the visual and hearing requirements of the job.]
- What typically precedes and follows performance of this task?

During the panel's discussion and analysis of the tasks, the perennial problem of policy and practice differences between agencies was apparent. It also became clear that most agencies had not adopted or issued concrete standards for the performance of the physically demanding tasks: "making an effort" was often the only explicit requirement. Nevertheless, from the panel's analysis, some common denominators did emerge for each of the tasks. Those common denominators are summarized in Table 5.

Finally, the panel's discussion also made clear that the consequences of a CO performing poorly on the physically demanding tasks can be severe - for the CO him/herself, for other COs, for inmates, and for the facility as a whole. The demands might not be especially high, but they are critical.

TABLE 5
Common Denominators for Physically Demanding Tasks As Defined by the Panel of CO Job Experts

Walk or stand for long periods of time.

No choice but to do this. The amount of walking required varies significantly by facility, shift, and assignment. Day and swing shift would typically walk or stand for 7 - 7.5 hours. Graveyard would walk or stand for 5 - 7 hours. Stairs are typically present and must be climbed.

Pursue inmates on foot (running).

Task is not required; call back up or control for assistance. If CO runs too far, may have trouble handling inmate even if s/he does catch him/her.

Run to the scene of an emergency.

This is an absolute requirement. If an emergency occurs, you must get there as fast as possible. Typical distance to scene of emergency was estimated to be 100 yards, with one flight of up to 50 stairs.

Physically subdue or restrain a violent inmate by yourself.

When this typically occurs, CO will be within voice range of help. If not, it is likely to take 3-5 minutes before help will arrive. Incidence rates in booking are likely to be much higher than in housing. The experts said that this situation is basically a "street fight" and the CO must be able to defend self. All sizes of inmates may be involved here. In larger, sentenced facilities, however, weightlifting is a popular inmate activity.

Self defense training could be extremely helpful in such situations. However, the element of surprise and arousal involved make it essential that COs are not only trained in these techniques, but that they also practice them regularly. Otherwise, it seems unlikely that they will be particularly useful under these conditions.

Physically subdue or restrain a violent inmate with the help of another officer.

When such an incident occurs, our experts agreed that the CO must be willing to jump in and help immediately. This task has a considerably higher frequency than does restraining inmates on your own (2.9 vs. 1.8 from the JAQ).

In addition to training in self defense and restraint techniques, the experts felt that knowledge of the following was important in performing this task:

- "Reasonable force" to deal with threat
- Escalation of force consistent with threat
- When the inmates stop resisting, CO must stop immediately (even when they have just hit you and then stop).
- Knowledge of the Penal Code and case law regarding use of force.
- Legal liabilities for use of excessive force.

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Table 5: Common Denominators (continued)

Physically separate two fighting inmates with the help of another officer.

The CO is required to do this within reason. The first step is to isolate the aggressor from the other inmates. Security of other inmates is a higher priority than separating the fighters. If possible, the key is to grab the aggressor. Otherwise, come from behind and pull them apart simultaneously.

Physically separate two fighting inmates by yourself.

The CO has almost complete discretion here. Policy may vary but most, say not to do this. This is a common mistake made by overzealous trainees. The key is to isolate the incident from other inmates and use verbal commands to try to get them to stop. Stand back. Call immediately for back-up.

Defend yourself against an inmate armed with a weapon, disarm, and subdue inmate.

If this situation occurs, obviously the officer will need to defend him or herself. Rarely, however, would an officer be attacked outright. This situation would arise most frequently where an inmate does not want to come out of his or her cell.

In this latter, more common, situation, the officer will usually have time to try to talk the inmate out of the situation and therefore to get help.

The most common weapon used in this situation would be a knife or other cutting instrument.

Self-defense training with practice would be extremely helpful.

Search areas for contraband that are not easily accessible (e.g., under beds, in, behind, and around large equipment, vehicles).

Usually there is no choice but to do this _ it is a common task. In some cases mirrors can be used, but the CO must still typically get down on hands and knees to use the mirror. The distance at which these things must be spotted is minimal.

Lift, carry, and/or drag heavy objects (e.g., disabled or unconscious inmate or piece of equipment).

Where an inmate is concerned, the choice is to drag rather than carry. Must be able, however, to dead lift and carry an air pack in the event of a fire (30-35 lbs.). The distance that an inmate might have to be dragged in a fire would be 50-100 feet to remove from smoke. If stairs, would carry down. Air packs may have to be carried up at least one flight of 40-50 steps.

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Table 5: Common Denominators (continued)

Operate difficult-to-operate gates, doors, or locks manually (e.g., when electronic or mechanical mechanisms fail).

When this situation occurs, there is little or no choice involved. In an emergency (e.g., fire) it must be done immediately. Size and weight of the gates, etc. varies considerably across facilities. Although some can be quite heavy and difficult to operate, a female CO in our expert group said that they can be handled once you learn their "tricks".

Push hard-to-move objects by hand

The officer can usually find an alternative way to accomplish the objective.

Pull yourself up over obstacles

The officer can usually find an alternative way to accomplish the objective.

PHYSICAL ABILITIES TELEPHONE SURVEY

The final step in the development of the preliminary physical performance standards was to get estimates, from a larger number of agencies than were involved in the panel analysis, of the typical sequences, distances, speeds, and weights involved in the performance of the physically-demanding tasks. The goal was to derive a typical minimum statewide standard for each task.

To accomplish this, we conducted a series of half-hour telephone interviews with CO supervisors nominated by their agency Project Coordinators as being knowledgeable about the physical requirements of the CO job. We requested one expert from each facility in each participating agency. The final sample came from 30 different facilities, located in 19 different agencies; their names and agencies are listed in Appendix B, Part 1.

During the interviews, the CO supervisors were asked to describe, for as many of the physically-demanding tasks as time allowed, the typical circumstances under which the task is performed in their facilities and the level of CO performance which is considered minimally acceptable. Examples of the interview questions are listed in Table 6.

The PDI interviewers took detailed notes on all responses and, as the interviews progressed, summarized (synthesized or tallied) them across facilities. As is apparent from Table 6, many of the questions of interest were of the type which produced "narrative" rather than "countable" responses, and for which responses thus needed to be summarized through synthesis rather than simple tallying. Examples of the tallies of countable responses are reported in Appendix B, Part 2.

From the summarized responses, preliminary definitions of typical minimum performance standards were drafted for each of the physically demanding tasks. These preliminary definitions were checked and refined through each new telephone interview.

The outcome was a set of preliminary physical performance standards which, on the basis of all information gathered, appeared to us to represent typical statewide minimum requirements for COs' performance of the physically demanding core tasks in the job. Those preliminary standards are presented here in Table 7. Note that for 4 of the 15 physically demanding core tasks, the preliminary standard is defined as "no standard" and the reason for defining no standard is given.

We then proceeded with two concurrent steps: (1) a statewide verification survey to finalize the definitions of the CO physical performance standards; and (2) evaluation of alternative methods for addressing such standards during CO selection and/or pre-placement training. Those steps are described in the next two chapters of this report.

TABLE 6
Sample Telephone Interview Questions, By Task

Walk or stand for long periods of time.
Typically ...
How long must a CO walk or stand?

Pursue inmates on foot (running).
Typically ...
What are the circumstances?
What happens before and after?
How far must a CO pursue an inmate?
How fast is the CO expected to run?
What obstacles are encountered?

Physically subdue or restrain an inmate by yourself.
Typically...
How long until help arrives?
What are the circumstances?
What happens before and after?

Physically separate two fighting inmates by yourself.
Typically ...
What are the circumstances?
How long until help arrives?
What happens before and after?

Defend self against an inmate armed with a weapon; disarm and subdue the inmate.
Typically ...
What are the circumstances?
How long does it take?
What happens before and after?

Carry heavy objects by yourself.
Typically ...
What are the circumstances?
How long does it take?
What happens before and after?
How heavy are the objects?
How far do you have to move them?

Drag heavy objects.
Typically ...
What are the circumstances?
How long does it take?
What happens before and after?
How heavy are the objects?
How far do you have to move them?

Operate difficult-to-operate gates, doors, or locks manually.

What types of gates, doors, and locks do you have?
How difficult are they to operate?
How much force do they require?

Run to the scene of a disturbance or emergency. Typically ...
What are the circumstances?
What happens before and after?
How far must a CO run?
How fast must the CO run?
What obstacles are encountered?

Physically subdue or restrain an inmate with help from another CO.
Typically ...
What are the circumstances?
How long does it take?
What happens before and after?

Physically separate two fighting inmates with help from another CO.
Typically ...
What are the circumstances?
How long does it take?
What happens before and after?

Search areas that are not easily accessible for contraband.
Typically ...
What types of areas?
How long does it take?
What happens before and after?

Lift and carry heavy objects with the help of another officer.
Typically ...
What are the circumstances?
How long does it take?
What happens before and after?
How heavy are the objects?
How far do you have to move them?

TABLE 7
Preliminary CO Physical Performance Standards

1. Walk or stand for long periods of time.

   Be able to walk or stand for seven hours of an eight hour shift.

2. Pursue inmates on foot (running).

   After walking/standing for seven hours of an eight hour shift, be able to pursue a running inmate by:

   A. Sprinting a distance of 50 yards or more, and
   B. Maintaining a brisk walk or jog for 500 yards or more.

3. Run to the scene of a disturbance or emergency.

   After walking/standing for seven hours of an eight hour shift, be able to walk briskly or jog a distance of 150 feet to the scene of an emergency, including climbing one short flight of stairs (e.g., 20 steps), in a total time of 30 seconds or less.

4. Physically subdue or restrain an inmate by yourself.

   After walking/standing for seven hours of an eight hour shift, be able to apply appropriate techniques to physically restrain a resisting individual, by yourself, for at least 30 seconds.

5. Physically subdue or restrain an inmate with the help of another person.

   After walking/standing for seven hours of an eight hour shift, be able to apply appropriate techniques to help another officer to:

   A. Move a resisting individual a distance of 20 feet or more (e.g., away from the scene of a disturbance), and
   B. Physically restrain a resisting individual for at least one minute.

6. Physically separate two fighting inmates with the help of another officer.

   After walking/standing for seven hours of an eight hour shift, and then walking briskly or jogging 150 feet in response to a call for help, be able to help another officer separate two fighting inmates by approaching one of the inmates from behind, pulling the inmate away and applying appropriate techniques to restrain the inmate for at least one minute.

7. Physically separate two fighting inmates by yourself.

   No standard; this task is frequently proscribed (i.e., is against regulations in many facilities).

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TABLE 7: Preliminary CO Standards (continued)

8. **Defend yourself against an inmate armed with a weapon, disarm and subdue inmate.**

   After walking/standing for seven hours of an eight hour shift, be able to handle an attacking inmate by verbally de-escalating the situation if possible and, when that is not possible, calling for assistance, retreating, or otherwise acting (e.g., using mace) to minimize injury to self and others.

9. **Search areas that are not easily accessible for contraband.**

   After walking/standing for seven hours of an eight hour shift, be able to repeatedly:

   A. Assume position to look under a bed and visually search the area for contraband; and,
   B. Step up on a chair and maintain balance while reaching to search high areas.

10. **Carry heavy objects by yourself.**

    After walking/standing for seven hours of an eight hour shift, be able to carry a wall mounted, 30-pound Scott Airpack on your back and walk briskly 75 feet or more.

11. **Lift and carry heavy objects with the help of another officer.**

    After walking/standing for seven hours of an eight hour shift, be able, with the help of another officer, to lift and carry a 165-pound inmate on a stretcher for a distance of 75 feet or more.

12. **Drag heavy objects.**

    After walking/standing for seven hours of an eight hour shift, and walking briskly or jogging 75 feet, be able to apply appropriate techniques to quickly drag a 165-pound inmate for a distance of 20 feet or more.

13. **Operate difficult-to-operate gates, doors, or locks manually.**

    No standard; gates, doors, and locks typically are not difficult to open. Those that are difficult vary too much in size and weight to allow specification of a typical performance standard.

14. **Push hard-to-move objects by hand.**

    No standard; when this task is required, assistance almost always is available.

15. **Pull yourself up over obstacles.**

    No standard; alternative ways to accomplish the objective almost always are available.

IV. DEVELOPMENT AND VERIFICATION OF THE FINAL CO PHYSICAL PERFORMANCE STANDARDS

VERIFICATION SURVEY METHOD

To develop the final CO physical performance standards, we put the preliminary standards into written survey form, and had STC consultants distribute multiple copies of the survey to all agencies participating in the research study. Each agency was asked to have the survey completed by at least two to three CO job experts from each of their facilities (to include at least one supervisor and one incumbent, and at least one male and one female).

The survey, a complete copy of which is given in Appendix C, Part 1, listed the preliminary standard for each physically demanding task and asked respondents to specify:

- o Is this standard appropriate for your facility? (yes or no) and,
- o If "no", how does the standard need to be revised to become appropriate?

The four tasks for which "no standard", was defined as typical were included in the survey along with the others, with the following instructions to respondents:

> In those cases, we want to know whether it is accurate, for your facility, that no standard exists for that task. If "no standard" is correct, check "yes". On the other hand, if your facility does have a performance standard/requirement for that task, check "no" and write in a description of the standard.

The yes-no ratings were designed to allow straightforward computation of an "endorsement rate" for each preliminary standard: computation of the proportion of respondents, from each surveyed agency, who endorsed each standard, as written, as being appropriate for their facility. From these endorsement rates, we could test the hypothesis that each standard defines a typical statewide minimum requirement. (Or, in the case of the "no standard" tasks, test the hypothesis that no typical statewide requirement exists.)

The criterion set was that each preliminary standard, to be considered verified as a typical statewide minimum standard, needed to be endorsed by the majority of respondents in the majority of the agencies surveyed. That is, to be acceptable "as is", a standard needed to be endorsed by over half of the respondents in over half of the surveyed agencies. The higher the endorsement rate, the more widely applicable we could expect the standard to be.

When respondents disagreed with a preliminary standard, they were asked to revise it to make it accurate for their facility. This was designed to allow us to learn what changes, if any, in the definitions of the preliminary standards could be introduced to widen their statewide applicability. Even when standards met our criterion for verification, we wanted to review the comments and suggested revisions from respondents to see whether the standards could be further improved.

COMPOSITION OF THE VERIFICATION SAMPLE

Completed verification surveys were returned by a total of 52 respondents from 17 different facilities (see Appendix C, Part 2 for a complete listing). The number of respondents per facility ranged from one to four, with three to four respondents per facility being most common. In most cases, those three to four respondents comprised both males and females, and both incumbents and supervisors. In total, the sample comprised:

- 19 females and 33 males;
- 32 incumbents and 20 supervisors.

The 17 facilities represented include both men's and women's institutions, range in size from small to large, and draw from the full range of geographic locations in the state. They also include four facilities which had not participated in the preceding physical abilities telephone survey. The presence of these four "new" facilities makes the verification a stronger test of the statewide typicality of the standards.

VERIFICATION SURVEY RESULTS

Appendix C, Part 2 contains lists of all ratings and comments and suggested revisions provided by respondents, plus summaries of those responses by facility, by sex of respondent, and by respondent position level. The results are further summarized and discussed below.

Use of Both Ratings and Comments in Computation of Endorsement Rates

In reviewing the completed verification surveys, we foundthat respondents' comments concerning suggested revisions for standards did not always appear fully consistent with their yes-no ratings of the accuracy of those standards.

The four "no standard" tasks proved to be the source of almost all of those discrepancies, especially the first of the four "no standard" tasks (number 7 in the survey: "Physically separate two fighting inmates by yourself"). On it, almost 20% of the respondents appeared to have been confused about the meaning of a yes-no rating: They checked "no" (suggesting that "no standard; against regulations in many facilities" was inaccurate for their facility) but then, in their comments, stated that the task is against regulations in their facilities, that officers are required to get back up before trying to physically separate fighting inmates.

Additionally, there were two respondents whose "yes" ratings of several standards were accompanied by comments such as "accurate if" part of the standard were deleted.

The presence of these inconsistencies indicated that endorsement rates computed from the yes-no ratings alone would, in a few cases, be misleading. Thus, endorsement rates were computed both from ratings alone and from ratings plus comments; in the latter case (referred to as "rates based on comments"), any apparent inconsistencies between ratings and comments were resolved in favor of the comments.

Wherever differences emerged in the endorsement rates computed through the two different approaches, those differences are identified in the results reported in the remainder of this chapter.

Overall Summaries of Endorsement Rate Results

Table 8 summarizes the endorsement rate results for the total sample; Table 9 shows the breakdown of results by respondent sex and position level. As these tables show:

- All 15 of the preliminary standards (including the four "no standard" statements: 7, 13, 14 & 15) are endorsed as accurate by the majority of the total sample: by at least 60% based on ratings alone; by at least 77% based on comments.
- Regardless of the method used to compute endorsement rates, 14 of the 15 preliminary standards (all but number 7) meet the verification criterion of being endorsed by the majority of respondents from the majority of facilities. Each received majority endorsement from at least 70% of the different facilities.
- With endorsement rates based on comments, number 7 also meets the verification criterion, receiving majority endorsement from 94% of the different facilities. [The comments made clear that the task involved in this case -- acting alone to physically separate two fighting inmates-- is indeed against regulations in most facilities and that it is accurate to have "no standard" for that task. See Appendix E.]
- There are no systematic differences in endorsement rates as a function of respondent sex or position level.

TABLE 8

SUMMARY OF VERIFICATION SURVEY RESULTS

PRELIMINARY STANDARD**	Percentage of Respondents (N-52) Endorsing Each Standard		Percentage of Facilities (N-17) Giving Majority Endorsement* to each Standard	
	from Ratings	from Comments	from Ratings	from Comments
1	96 %	96 %	100 %	100 %
2	79	77	76	71
3	88	87	94	88
4	90	90	88	88
5	98	98	100	100
6	98	98	100	100
7	60	90	47	94
8	90	90	82	82
9	100	98	100	100
10	96	96	94	94
11	90	88	88	88
12	92	92	94	94
13	79	90	71	94
14	85	98	76	94
15	83	84	82	88

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*Majority endorsement was defined as endorsement by greater than 50% of the respondents; given the numbers of respondents involved, the actual majority endorsement rates within facilities ranged from 67% to 100%.

**See Table 7 (Page 23-24) for definitions of preliminary standards.

TABLE 9

VERIFICATION SURVEY RESULTS BY RESPONDENT SEX & POSITION LEVEL

ENDORSEMENT PERCENTAGES*, by:

PRELIMINARY	Respondent Gender				Respondent Position Level			
STANDARD**	Female (N=19)		Male (N=33)		Incumbent (N=32)		Supervisor (N=20)	
1	95		97		97		95	
2	95		70	(67)	84	(81)	70	
3	89		88	(85)	88	(84)	90	
4	89		91		84		100	
5	100		97		97		100	
6	100		97		97		100	
7	42	(89)	70	(91)	56	(91)	65	(91)
8	95		88		88		95	
9	100		100	(97)	100	(97)	100	
10	100		94		97		95	
11	100		85	(82)	94	(91)	85	
12	95		91		94		90	
13	63	(84)	88	(94)	78	(88)	80	(95)
14	79	(100)	88	(100)	84	(100)	85	(95)
15	79	(95)	76	(79)	72	(78)	85	(95)

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*Where respondents' ratings appear to be inconsistent with their comments, two endorsement percentages are reported: the first is based on the respondents' ratings, the other (given in parentheses) is based on the respondents' comments.

**See Table 7 (Pages 23-24) for definitions of preliminary standards.

Summaries, by Standard, of Results and Conclusions

Summarized in this section, for each of the 15 physically demanding CO core tasks, are the survey results and our conclusions with respect to the statewide accuracy of the preliminary minimum standards examined through the verification survey.

1. **Task: Walk or stand for long periods of time.**

   Preliminary Statement of Typical Minimum Standard: Be able to walk or stand for 7 hours of an 8 hour shift.

   Survey Results: This standard was one of the most highly endorsed ones (majority endorsement from 100% of the facilities). Five respondents added comments to their ratings. Three of the five comments suggested increasing the standard (to, for example, 9 hours of a 10 hour shift or 10 hours of a 12 hour shift); only one suggested decreasing the standard (to 3-4 hours of an 8 hour shift).

   Conclusion: Given the 100% majority endorsement rate and that only one respondent suggested any decrease in the standard, it is clear that this standard, as currently written, provides an accurate description of typical statewide minimum requirements for CO performance.

2. **Task: Pursue inmates on foot (running).**

   Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to pursue a running inmate by:

   A. Sprinting a distance of 50 yards or more, and
   B. Maintaining a brisk walk or jog for 500 yards or more.

   Survey Results: This standard was one of the few to receive a majority endorsement rate lower than 80% (76% from ratings; 71% from comments). It was rejected in whole or in part by 11 respondents from across 8 different facilities. The major theme in their comments is that the distances specified in the standard should be reduced. The 500 yard walk/jog seems especially called into question by the comments; a few comments also suggest, however, that the 50 yard sprint distance be shortened to 20 or 30 yards.

   Conclusion: Although this standard as a whole was endorsed as accurate by a substantial majority of respondents, the number of rejections of the distances involved suggests that the 500 yard walk/jog portion of the standard (Part B) is inappropriate in a statement of typical statewide minimum requirements, and that the sprint portion (Part A) should perhaps be shortened to 30-50 yards (versus 50 yards or more). [This takes the standard back closer to the "no standard" suggested by the original panel of job experts (see Table 5).]

3. **Task:** Run to the scene of a disturbance or emergency.

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to walk briskly or jog a distance of 150 feet to the scene of an emergency, including climbing one short flight of stairs (e.g., 20 steps), in a total time of 30 seconds or less.

Survey Results: This standard received majority endorsement from approximately 90% of the facilities (94% from ratings, 88% from comments). Examination of comments from respondents shows three suggesting that the standard might become even more widely applicable with deletion of the reference to the time limit. Additionally, comments from four respondents focused on the reference to stair climbing, but showed no consensus about how that reference should be revised: two respondents suggested increasing the number of stairs to be climbed; two others suggested deleting all reference to stairs. None of the comments suggested any change in the distance defined.

Conclusion: This standard is widely applicable as it is currently written. However, by modifying the time reference to make it approximate rather than absolute (i.e., to read, "within a total time of approximately 30 seconds") it would likely be more appropriate as a statement of the typical statewide minimum requirement. No change seems appropriate in the reference to stair climbing; its appropriateness as a typical minimum requirement is supported by the fact that the suggestions for revising it were equally balanced between suggesting an increase and suggesting a decrease.

4. **Task:** Physically subdue or restrain an inmate by yourself.

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to apply appropriate techniques to physically restrain a resisting individual, by yourself, for at least 30 seconds.

Survey Results: This standard received majority endorsement from 88% of the facilities, and there were no common themes to the suggested revisions from dissenting respondents. Two comments suggested increasing the time limit, one suggested deleting it. Only two comments suggested that the officer should wait for back-up rather than acting alone.

Conclusion: This standard, as currently written, provides an accurate description of typical statewide minimum requirements for CO performance.

5. **Task: Physically subdue or restrain an inmate with the help of another person.**

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to apply appropriate techniques to help another officer to:

A. Move a resisting individual a distance of 20 feet or more (e.g., away from the scene of a disturbance), and

B. Physically restrain a resisting individual for at least one minute.

Survey Results: This was one of the most strongly endorsed standards, receiving majority endorsement from 100% of the facilities. Only three respondents commented on it; there is no common theme to those comments.

Conclusion: This standard, as currently written, provides an accurate description of typical statewide minimum requirements for CO performance.

6. **Task: Physically separate two fighting inmates with the help of another officer.**

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, and then walking briskly or jogging 150 feet in response to a call for help, be able to help another officer separate two fighting inmates by approaching one of the inmates from behind, pulling the inmate away, and applying appropriate techniques to restrain the inmate for at least one minute.

Survey Results: This standard also received majority endorsement from 100% of the facilities, and was the subject of no consistent comments.

Conclusion: This standard, as currently written, provides an accurate description of typical statewide minimum requirements for CO performance.

7. **Task: Physically separate two fighting inmates by yourself.**

Preliminary Statement of Typical Minimum Standard: No standard; this task is frequently proscribed (i.e., is against regulations in many facilities).

Survey Results: As previously described, the "yes-no" ratings of this "no standard" statement created some confusion for respondents and produced majority endorsement for "no standard" from fewer than half of the facilities (47%). Respondents' comments clearly indicate, however, that this task is indeed almost always proscribed and, hence, is not an appropriate subject of a statewide standard.

From respondents' comments, "no standard; task against regulations" receives majority endorsement from 94% of the facilities.

Conclusion: Although acting alone to physically separate two fighting inmates is identified as one of the core tasks of the CO job (because more than 50% of the COs who completed the statewide job analysis questionnaire described it as something they occasionally do on the job), this task is against regulations in so many facilities that it should not be made the subject of a statewide physical performance standard.

Given that officers should get back,up before attempting to physically separate two fighting inmates, task 7 becomes redundant with task 6, and is appropriately covered by the physical performance standard described for that task. No separate standard is needed.

8. **Task: Defend yourself against an inmate armed with a weapon, disarm and subdue inmate.**

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to handle an attacking inmate by verbally de-escalating the situation if possible and, when that is not possible, calling for assistance, retreating, or otherwise acting (e.g., using mace) to minimize injury to self and others.

Survey Results: This standard received majority endorsement from 82% of the facilities. Respondents' comments indicated that, when the standard was judged to be inaccurate the reason was usually the reference to mace (e.g., "officers not armed with mace; otherwise standard OK"). With deletion of the reference to mace, the standard would be expected to receive majority endorsement from 100% of the facilities.

Conclusion: Although this standard is widely applicable as currently worded, the reference to mace should be deleted to widen its applicability even further.

9. **Task: Search areas that are not easily accessible for contraband.**

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to repeatedly:

A. Assume position to look under a bed and visually search the area for contraband; and,

B. Step up on a chair and maintain balance while reaching to search high areas

Survey Results: This was one of the most strongly endorsed standards, receiving majority endorsement from all of the facilities. Indeed, it received "yes" ratings from 100% of the respondents. One respondent did comment, however, that in his facility climbing is done on ladders, bars of cells, and/or fixed bunks rather than chairs. Another respondent also suggested expanding the standard to include climbing up onto bunks and bars of cells.

Conclusion: In light of the unanimous endorsement by respondents, and given that stepping up on a chair is no harder, and is probably easier, than climbing ladders, cell bars, or bunks, there is no question that this standard as currently worded provides an accurate description of typical statewide minimum requirements for CO performance.

10. **Task: Carry heavy objects by yourself.**

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to carry a wall mounted 30 pound Scott Airpack on your back and walk briskly 75 feet or more.

Survey Results: This standard was another strongly endorsed one, receiving majority endorsement from 94% of the facilities. Respondents' comments raise no common themes. As suggested by a comment from one respondent (that his facility uses M.S.A. rather than Scott Airpacks), it does seem inappropriate, however, to have a brand name specified in the standard.

Conclusion: The standard, as currently written, provides an accurate description of a typical statewide minimum requirement for CO performance. However, the reference to the airpack should not include a brand name.

11. **Task: Lift and carry heavy objects with the help of another officer.**

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able, with the help of another officer, to lift and carry a 165-pound inmate on a stretcher for a distance of 75 feet or more.

Survey Results: This standard received majority endorsement from 88% of the facilities. Respondents' comments covered a number of topics. Two emphasized the importance of maintaining physical fitness. Two emphasized that the task is performed only with assistance; another pointed out that inmates as well as other officers may provide the assistance. Substantive changes in the standard were suggested by respondents from only two facilities. From one facility, two of four respondents suggested that the stretcher carrying portion of the standard should be revised to substitute using a gurney or wheelchair (the two other respondents endorsed the standard as currently written). From another facility, one of three respondents suggested that dragging the inmate on a blanket could be substituted for carrying the inmate on a stretcher (again, however, the other two respondents endorsed the standard as currently written). No respondents suggested revision in the inmate weight or distance defined in the standard.

Conclusion: The high endorsement rate, and the lack of consistency in the few revisions suggested, indicate that this standard, as currently written, provides an accurate description of a typical statewide minimum requirement for CO performance.

12. **Task: Drag heavy objects.**

Preliminary Statement of Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, and walking briskly or jogging 75 feet, be able to apply appropriate techniques to quickly drag a 165-pound inmate for a distance of 20 feet or more.

Survey Results: This standard received majority endorsement from 94% of the facilities. Two respondents commented on the importance of maintaining physical fitness; there were no other common themes to the comments. Only one respondent suggested a revision in the defined inmate weight (suggesting 140 rather than 165 pounds). None suggested revision in the defined distance.

Conclusion: This standard, as currently written, is accurate as a description of typical statewide minimum requirements for CO performance.

13. **Task: Operate difficult-to-operate gates, doors, or locks manually.**

Preliminary Statement of Typical Minimum Standard: No standard; gates, doors, and locks typically are not difficult to open. Those that are difficult vary too much in size and weight to allow specification of a typical performance standard.

Survey Results: Subject to some of the same confusion as the "no standard" statement for task 7, the yes-no ratings showed this "no standard" statement to have majority endorsement from 71% of the facilities, while respondents' comments put the endorsement rate at 94% of facilities. The most common theme to respondents' comments is that their facilities have no such difficult to-operate gates, doors, or locks. Where respondents did specify a standard for their facilities, they tended to be the only ones from their facility who did so, and there was no consistency in the nature of the different standards suggested.

Conclusion: It continues to appear that this task should not be made the subject of a statewide minimum performance standard.

14. **Task: Push hard-to-move objects by hand.**

Preliminary Statement of Typical Minimum Standard: No standard; when this task is required, assistance almost always is available.

Survey Results: For this "no standard", the yes-no ratings produced majority endorsement from 76% of the facilities, and respondents' comments raise that figure to 94%. The comments emphasize the appropriateness of officers drawing upon others to perform this task (e.g., "hard to move objects are moved by inmates", "call maintenance", "get necessary assistance")

Conclusion: It continues to appear that this task should not be made the subject of a statewide minimum performance requirement.

15. **Task: Pull yourself up over obstacles.**

Preliminary Statement of Typical Minimum Standard: No standard; alternative ways to accomplish the objective almost always are available.

Survey Results: The statement of "no standard" for this final task received majority endorsement from approximately 85% of the facilities (82% based on the ratings, 86% based on respondents' comments). Only two comments suggest that a standard for this task might be appropriate: one specifies "for checking bunk beds during bed checks"; the other simply indicates "may be necessary in an emergency". The other comments all reject specification of a standard for this task.

Conclusion: It continues to appear that this task should not be made the subject of a statewide minimum performance requirement.

DESCRIPTION OF THE FINAL PHYSICAL PERFORMANCE STANDARDS

As is evident in the review of results given in the preceding sections, the physical abilities verification survey:

- gave strong support to our decision that four of the 15 physically demanding CO core tasks (numbers 7, 13, 14, and 15) should not be made the subject of a statewide minimum performance standard;
- clearly verified the statewide applicability of the preliminary standards defined for each of the other 11 tasks; and,
- pointed to revisions which could be introduced to increase even further the applicability of several of those standards (numbers 2, 3, 8, and 10).

Based on these results, we defined the final set of typical minimum standards for CO physical performance.

The final CO physical performance standards are given in Table 10. They are limited to the 11 physically demanding CO core tasks which the survey results confirmed to be appropriate, and they incorporate the revisions which the survey results indicated as appropriate for achieving maximum statewide applicability across participating agencies.

These standards, which define typical statewide minimum criteria for adequate CO performance on physically demanding tasks, are of critical importance in that they:

- clearly define an appropriate basis for development of statewide standards concerning the minimum level of physical ability which a new CO needs to bring to the job; and, thus,
- are fundamental to all of our subsequent work on this topic.

Before continuing, it is relevant to note that the physical requirements which the California State Personnel Board has found appropriate for CO positions in the California State Correctional System (Terra & Bach, 1981) are higher than the requirements portrayed here for agencies participating in the STC program. The difference arises because:

- Standards for state COs can appropriately be set to reflect the highest common denominators across state correctional facilities. State COs are reassignable from one state facility to another, and are expected to be able to meet minimum requirements at all facilities. As such, the highest minimum requirement of any facility can legitimately become the basis for State CO performance standards.
- Conversely, standards designed to be applicable across the many independent agencies which participate in the STC program need to reflect the typical minimum requirements (lowest common denominators) across those agencies. STC could not reasonably adopt standards which exceed the legitimate requirements of most participating agencies.

It is the case, of course, that a number of the participating agencies in the STC program do have minimum physical performance requirements for some tasks that are higher than those portrayed by the typical minimums (e.g., more stairs to be climbed; longer distances to be covered in pursuing inmates or running to the scene of emergencies). It is important to recognize that higher minimum standards in those agencies are in no way invalidated because the typical statewide minimum standards are lower.

Similarly, a few participating agencies in the STC program do have minimum physical performance requirements for some tasks which are lower than those portrayed by the typical minimums (e.g., no stairs to be climbed; gurneys used instead of stretchers for carrying inmates). See Chapter VII, Recommendations and Conclusions Regarding the Physical Conditioning Module, for discussion regarding use of the benchmark minimums as a screening device.

TABLE 10

Final CO Physical Performance Standards*

A. (1) **Task: Walk or stand for long periods of time.**

Typical Minimum Standard: Be able to walk or stand for 7 hours of an 8 hour shift.

B. (2) **Task: Pursue inmates on foot (running).**

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to pursue a running inmate by sprinting a distance of 30 to 50 yards.

C. (3) **Task: Run to the scene of a disturbance or emergency.**

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to walk briskly or jog a distance of 150 feet to the scene of an emergency, including climbing one short flight of stairs 20 steps), within a total time of approximately 30 seconds.

D. (4) **Task: Physically subdue or restrain an inmate by yourself.**

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to apply appropriate techniques to physically restrain a resisting individual, by yourself, for at least 30 seconds.

E. (5) Task: Physically subdue or restrain an inmate with the help of another person.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to apply appropriate techniques to help another officer to:

1. Move a resisting individual a distance of 20 feet or more (e.g., away from the scene of a disturbance), and
2. Physically restrain a resisting individual for at least one minute.

CONTINUE, NEXT PAGE

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*The numbers in parentheses identify the corresponding preliminary standards (from Table 7 and the survey in Appendix C).

TABLE 10: Final Standards (continued)

F. (6) Task: Physically separate two fighting inmates with the help of another officer.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, and then walking briskly or jogging 150 feet in response to a call for help, be able to help another officer separate two fighting inmates by approaching one of the inmates from behind, pulling the inmate away, and applying appropriate techniques to restrain the inmate for at least one minute.

G. (8) Task: Defend yourself against an inmate armed with a weapon, disarm, and subdue the inmate.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to handle an attacking inmate by verbally de-escalating the situation if possible and, when that is not possible, calling for assistance, retreating, or otherwise acting to minimize injury to self and others.

H. (9) Task: Search areas that are not easily accessible for contraband.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to repeatedly:

1. Assume position to look under a bed and visually search the area for contraband; and,
2. Step up on a chair and maintain balance while reaching to search high areas.

I. (10) Task: Carry heavy objects by yourself.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to carry a wall mounted 30 pound airpack on your back and walk briskly 75 feet or more.

J. (11) Task: Lift and carry heavy objects with the help of another officer.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able, with the help of another officer, to lift and carry a 165 pound inmate on a stretcher for a distance of 75 feet or more.

K. (12) Task: Drag heavy objects.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, and walking briskly or jogging 75 feet, be able to apply appropriate technique to quickly drag a 165-pound inmate for a distance of 20 feet or more.

V. EVALUATION OF ALTERNATIVE METHODS OF IMPLEMENTING ENTRY-LEVEL CO PHYSICAL ABILITY STANDARDS

Once we had learned from the job analysis (see Chapter III) that entry level physical ability standards were warranted by the CO job, and had begun to define the typical minimum performance requirements for the CO core tasks, we identified and worked with an expert panel of exercise physiologists to evaluate, alternative approaches to addressing those standards.

COMPOSITION OF THE EXPERT PANEL

The panel consisted of three Ph.D. level exercise physiologists with extensive applied experience and expertise in designing, conducting, and evaluating physical conditioning and fitness testing programs:

- Dr. Glenn P. Town
- Dr. John (Jack) M. Kelly
- Dr. William D. Gilman

Dr. Town received his Ph.D. in Exercise Physiology from Kent State University in 1981 He currently directs the Exercise Physiology Program at Wheaton College, where he also developed the Wheaton College Wellness Program and teaches a number of classes. He was previously the Director of the Firehouse Fitness Program for the City of St. Paul, Minnesota, and Physical Education Instructor and Lab Assistant at Kent State. Dr. Town has authored two relevant books and several relevant professional articles.

Dr. Kelly received his Ph.D. from Springfield College in 1969. He has been teaching and directing the Human Performance Laboratory in the Department of Health, Physical Education and Recreation at St. Cloud State University since 1969 and has held several offices in professional organizations. He is also the author of numerous relevant professional publications.

Dr. Gilman received his Ph D. from Kent State University in 1984. He currently directs the physical fitness program for the Department of Fire and Safety Services in St. Paul, Minnesota. Previous to this, Dr. Gilman worked as a laboratory assistant and served as a fitness consultant.

Full vitae for all three experts are provided in Appendix D.

THE BROAD TYPES OF ALTERNATIVE APPROACHES CONSIDERED

The major alternatives we identified and evaluated involved implementing CO entry level physical ability standards through:

1. Performance testing at the selection stage, and/or

2. Physical conditioning and testing at the basic training stage.

Before proceeding to the review of the evaluation criteria and results, we need to emphasize that both of these major alternative approaches (whether adopted singly or in combination) would need to be preceded by medical screening at the selection stage. Indeed, because of the physical demands of the job itself, medical screening at selection would be important even if neither physical abilities testing or training were implemented.

MEDICAL SCREENING REQUIREMENT

Medical screening is an essential prerequisite to physical performance testing and/or physical conditioning programs because the physical demands of each of such programs (whether taken singly or in combination) create a risk of physical harm to participants and a liability risk to participating agencies.

Assuming the demands of the testing and/or conditioning are geared to the typical statewide minimum performance requirements, our panel of exercise physiologists concluded that the degree of risk will be negligible for the large majority of adults. They noted that the degree of risk will increase, however, for adults who enter the testing and/or conditioning with particular pre-existing physical/medical conditions. The particular nature of the pre-existing conditions which might raise the degree of risk to an unacceptably high level (in the eyes of the candidate and/or the employing agency) must be determined on a case by case and activity-by-activity basis. This is the purpose of medical screening.

That is, medical screening is an essential prerequisite to placement in any physical testing or conditioning program (and to placement in the CO job) because it allows for case by-case identification of candidates who have pre-existing physical/medical conditions which contraindicate participation in particular aspects of the program or job. This, in turn, enables the employing agency to make reasonable accommodation to the needs of such candidates (or exclude the candidate when reasonable accommodation is infeasible) and, hence, to keep all risk of physical harm and associated liability to a minimum. For further description of the benefits of pre-placement medical screening, see Schofield (1984).

Note that diagnosis of conditions contraindicating participation in particular activities does not necessarily provide a sound or legal reason for complete exclusion of a candidate: the employing agency must, if feasible, make reasonable accommodation to enable the candidate's participation.

Care needs to be taken in assuring the job relatedness and appropriateness of medical screening. Current professional and legal standards suggest that pre-placement medical examinations have typically been too conservative, resulting in rejection of more candidates than warranted by the job requirements (see, for example, Medical Standards News, Spring 1984).

Dunnette and Fleishman (1982) recommend providing examining physicians with a list of the job requirements, to help them to focus on candidates' abilities rather than their disabilities, and, as a result, to help decrease the number of unnecessary rejections. Two years ago, Orange County developed and implemented such a checklist for use by physicians examining pregnant Juvenile Counselors. It has proven helpful to physicians in making informed decisions; in addition, legal counsel has advised the physicians that it is to their legal advantage to complete the form, as it increases the job-relatedness of the medical screening process.

We recommend that all participating agencies implement such a checklist for use in medical examinations, tailoring the checklist to cover both the CO physical conditioning and/or testing programs (if any) being used in their facilities and the on-the-job physical demands of their particular CO positions. The checklist instructions should make clear that examining physicians are expected to identify and use professionally appropriate diagnostic procedures to evaluate candidates' fitness to engage in each of the listed activities. The checklist should then call for the examining physician to record, for each activity, whether or not any probable contraindicating conditions were revealed by the examination.

The checklist instructions also must make clear that diagnosis of "probable contraindicating conditions" will not, in itself, disqualify a candidate. Rather, it will mean only that the candidate and employing agency must now reach a case-by-case decision as to how to handle the situation. The alternatives to disqualification include:

- pursuing further medical examination to clarify the degree of risk;
- accepting the indicated risk (placing the candidate in the program and/or job with no modification of required activities);
- making a change in the required activities of the program and/or job (accommodating the candidate's specific situation by eliminating or modifying the particular contraindicated activities).

The employing agency retains full responsibility for making the final choice among these options.

Appendix E provides a sample of a medical screening checklist and physician guidelines.

EVALUATION OF SELECTION STANDARDS VERSUS TRAINING STANDARDS

As mentioned previously, the major alternatives evaluated as potential methods for implementing entry-level physical abilities standards for the CO position were: (1) performance testing at the selection stage, and/or (2) physical conditioning and testing at the basic training stage. With the input and assistance of our expert panel of exercise physiologists, and reference to previous research and experience, we evaluated and ultimately chose between those two major alternatives based on three criteria:

A. Effectiveness (validity)
B. Adverse impact
C. Overall utility

Our findings and conclusions with respect to each criterion are summarized below.

A. Effectiveness: Both selection testing and basic training programs are judged to be potentially effective methods of assuring that new COs meet entry-level physical ability requirements.

For the selection testing alternative, the effectiveness question was expressed and answered as follows:

> Is it reasonable to expect to find or develop performance tests which would have validity as measures of the relevant CO physical abilities?
>
> Previous research clearly indicates that the answer to this question is "yes". [See, for example, the California State Personnel Board's physical abilities test validation for COs (Terra & Bach, 1981), the POST validation for Patrol Officers (Berner & Kohls, 1982), and review articles such as that by Hogan & Quigley (1984).] Validity data for females and minorities is limited relative to that for white males, but the subgroup data which are available support the generalizability of the white male validity results (e.g., Bernauer & Bonanno, 1975); such generalizability is indicated, also, by the larger literature on the elusiveness of differential validates.

For the alternative of physical conditioning and testing during basic training, the effectiveness question was expressed and answered as follows:

> Is it reasonable to expect that a short-term (e.g., 4 week) physical conditioning program could have a high success rate in assuring that trainees are able to meet or exceed the required physical performance standards?
>
> The consensus judgment of our expert panel of exercise physiologists is that the answer to this question also clearly is "yes" -- for males, females, and all age and ethnic subgroups.

> **Based on their experience in designing and conducting physical conditioning programs, our panel was unanimous in their judgment that, assuming no medical contraindications, virtually all adults would be able to meet or exceed the defined physical standards by means of a short-term conditioning program. Indeed, they concluded that the levels of physical ability which emerged from the job analyses as minimum requirements are sufficiently low that most young adult males, and large proportions of all other subgroups, would be expected to be able to meet or exceed minimum standards without any special physical conditioning. [This is consistent with the high passing rates found for males in the SPB and POST Physical Abilities Validations, where participants were drawn from populations very comparable to the CO population.] An exploratory study by Hernandez (1983), while subject to a number of limitations, supports the effectiveness of short term training for physical abilities.**

Overall, then, both selection testing and basic training are judged to offer potentially effective means of assuring that newly hired COs are able to meet the physical requirements of the job.

B. Adverse Impact: The selection testing alternative emerges as likely to produce substantially greater adverse impact than the pre-placement training approach.

Physical performance tests used in selection have consistently produced substantial adverse impact against women, some minority groups, and older candidates (cf. Hogan & Quigley, 1984). Estimates of the expected magnitude of the adverse impact against female CO candidates can be derived from the results obtained in the SPB and POST Validations (Terra & Bach, 1981; Berner & Kohls, 1982), where populations and types of required job-related abilities are very similar to those involved here. They lead us to expect that, at the typical minimum levels required for the statewide CO job, passing rates might reach close to 100% for males but be below 50% for females.

Conversely, with a basic training approach, our expert panel of exercise physiologists expects that virtually all candidates - in all subgroups - should be able to meet or exceed the minimum physical standards after short-term physical conditioning. Thus, performance tests administered after such a short-term conditioning program would be expected to show little, if any, adverse impact in passing rates.

Overall, physical conditioning and testing during the training stage appears likely to result in substantially less adverse impact than pre-training physical performance tests. Thus, we conclude, as has Maher (1984, p. 180), that medical examinations plus physical conditioning programs "exist as acceptable alternatives to physical ability tests, with less adverse impact." By the requirements of the Federal Uniform Guidelines (1978) the approach with the less adverse impact must be the preferred one, unless there are business necessity reasons arguing otherwise.

C. Utility: The training approach appears to offer a better overall cost benefit ratio to participating agencies than does the selection testing approach.

We evaluated the overall ratio of costs to benefits for each of the alternatives as follows:

> Given the expected pass rates, the costs of administering performance tests during the selection stage appear to far outweigh the benefits that would be gained. Virtually all males are expected to pass, meaning that - for this large subgroup of candidates - the tests will be virtually meaningless. The primary effect of the tests would be to screen out female candidates. In light of the relative importance of physical abilities versus other job-related worker characteristics (refer back to Table 3) and the short-term modifiability of the physical abilities, this means that high proportions of females will be screened out based on an attribute that is not only highly modifiable over the short term but also, while important, is substantially less critical than other characteristics. The costs in terms of loss of high potential candidates, and adverse impact liability, would seem to be unreasonably high

> Physical conditioning and testing during basic training is expected to have the same payoff as selection testing in terms of assuring that newly hired COs are able to meet the physical requirements of the job. It will also increase substantially the proportions of female candidates who are able to be accepted onto the job. Further, the physical conditioning program during training is expected to improve all participants' physical fitness and to provide all participants with a program that they can continue to pursue on their own to maintain (or even further increase) their physical fitness once they are, in fact, placed in the CO job. To the extent that participants do continue the physical conditioning program on an ongoing basis, there may be long term pay-offs in terms of reduced susceptibility to injury and, hence, reduced disability retirement and worker's compensation claims (Price et al., 1977; Dollar, 1983).

More time is required, and hence administrative cost is higher, for physical conditioning and testing during training than for testing at selection. In terms of both short and long-term benefits, however, we believe the training approach will have substantially higher utility for agencies than will the selection test approach.

CONCLUSION

Relative to performance testing at selection, physical conditioning and testing during basic training (preceded by a medical examination at selection) is expected to:

- be equally effective in ensuring that newly hired COs can meet the physical requirements of the job;
- result in substantially less adverse impact; and,
- yield higher overall utility.

The Federal Uniform Guidelines (1978) state that, in cases of equally valid alternatives, the option with the lesser adverse impact should be chosen. Sound management dictates that alternatives be selected in terms of their overall utility for the user. On both accounts, we recommend that physical ability standards be addressed by coupling medical screening with physical conditioning and testing during basic training, rather than with performance tests at selection.

VI. RECOMMENDED PHYSICAL CONDITIONING AND TESTING PROGRAM

After the expert panel of exercise physiologists had reviewed the CO physical performance standards and related job analysis information, and had determined with us that physical conditioning and testing during basic training (preceded by a medical examination at selection) represented the best overall approach for implementing entry level physical abilities standards, the panel developed and provided a concrete design for such a conditioning and testing program.

We critically reviewed the proposed design against the verification survey results, the research literature on physical fitness training and testing (see reference list for major examples), and programs used for similar purposes by other agencies (e.g., the Basic Academy Physical Conditioning Program designed by the California Commission on Peace Officer Standards and Training.) This critical review established for us that the overall program design was an effective one and also enabled us to refine the program even further. We in turn then recommended the program for implementation by the Board of Corrections, as one module of the Corrections Officer Core Training Course, and have developed the necessary instructor's materials to facilitate such implementation.

The Physical Conditioning Guide for instructors, a copy of which is given in Appendix F, provides a detailed description of the recommended program. Here, in this chapter of the report, the focus is on documenting the program's rationale and job relatedness for the CO position.

OVERALL PROGRAM GOALS

The physical conditioning program is designed to serve three major goals:

1. Fitness Assessment: Enable instructors to determine whether trainees have the physical fitness capacities necessary to meet typical minimum performance standards for physically demanding job tasks.
2. Fitness Improvement: Enable trainees to improve their job-related physical fitness capacities, not only to meet typical minimum standards, but also to maximize their individual abilities to handle the physical demands of the job.
3. Program Carry-over: Teach trainees a personal physical fitness routine which they can, if they choose, pursue on their own (after placement in the CO position) to continue to maintain and improve their job-related physical fitness.

The physical conditioning module is not designed to teach any specific techniques for performance of the physically demanding job tasks (e.g., techniques of self-defense, physical restraint, first aid); such techniques are addressed in other units and modules of the Basic Training Course. Rather, the physical conditioning module is designed to address the basic physical fitness capacities (such as agility, strength, and endurance) which are called upon in performing the physically demanding job tasks.

APPROACH FOLLOWED IN DESIGNING THE PROGRAM

The program was designed through an approach which can best be described in terms of three major steps:

1) identification of the job-related fitness capacities to be addressed (assessed and enhanced) through the program;

2) selection/development of an effective combination of exercises to address those fitness capacities; and,

3) establishment of "benchmark minimum" performance levels on selected exercises that could validly be used for the objective of determining whether trainees have the physical fitness necessary to meet typical minimum performance standards on physically demanding job tasks.

The job-related fitness capacities were first identified for us by our expert panel of exercise physiologists, based upon our job analysis information on the nature and importance of CO physical performance requirements (as summarized previously in Chapter III of this report) and their professional expertise and experience with respect to linkages between fitness capacities and physically demanding activities of the type required by this CO job. We then reviewed those fitness capacities for consistency with the broader literature on job-related physical abilities, focusing especially on previous research results with respect to the physical requirements of corrections officers and other related positions.

The particular capacities defined as job related by our expert panel proved to be well established ones within the broader literature on job-related physical abilities; and to be consistent with capacities which have been identified as important in previous research on CO and other closely related positions.

The selection/development of an effective combination of exercises for addressing those physical capacities also was first done by our expert panel of exercise physiologists and then critically reviewed for consistency with the broader literature before being finalized. The criteria used in designing and evaluating possible combinations of exercises included:

- validity for addressing (assessing and improving) the full range of job-related fitness capacities,

- administrative feasibility given expected training conditions and resources across participating agencies (e.g., ability to be conducted with minimum specialized equipment and to be effective within groups of trainees varying widely in their initial levels of physical fitness), and

- effectiveness in defining a personal physical fitness routine which trainees could continue to pursue on their own (after placement in the CO job) to continue to maintain and improve their job-related physical abilities.

Consideration was given both to standard exercises (e.g., side bends, push ups, sprints) and to work sample types of exercises (e.g., stretcher carries, dummy drags).

For serving the criterion of developing physical abilities, neither work sample exercises nor standard exercises have any systematic advantage. However, for serving the assessment objective of the program, work sample type exercises were considered preferable to standard exercises: they have higher credibility as assessment devices and allow more direct inferences to be made from exercise performance to job performance. (Similarly, in terms of the types of validity evidence available to support them, work sample exercises can be supported through very concrete and direct content validity evidence while standard exercises require more abstract construct validity evidence supporting their linkage through physical capacity constructs to job requirements.) Conversely, for serving the criteria of administrative feasibility and carry-over into personal fitness routines, standard exercises were considered preferable to work samples. Standard exercises tend to be ones that individuals can perform on their own with a minimum of specialized equipment.

The final combination of exercises recommended for inclusion in the program comprises both standard and work sample types of exercises, at a ratio of about four or five standard exercises to each work sample exercise. The exercises are described, along with the fitness capacities which they address, in the next part of this report.

Once the final combination of recommended exercises had been defined, "benchmark minimum" performance levels were established for selected exercises to serve the program objective of enabling instructors to determine whether trainees have the necessary fitness capacities to meet typical minimum performance standards on physically demanding job tasks. These "benchmark minimums" represent direct translations of typical minimum performance standards which we previously verified as having statewide applicability for participating agencies in the STC program (as described previously in Chapter IV of this report). Details on the "benchmark minimums" and their linkage to the minimum performance standards are given following the descriptions of the exercises and fitness capacities below.

GENERAL PROGRAM SCHEDULE

In total, 12 one hour sessions are allocated to the physical conditioning module. Those sessions are scheduled across the full four weeks of the Corrections Officer Basic Training Course, occurring during the last hour of each Monday, Wednesday, and Friday. The spacing of the physical conditioning sessions affords optimum opportunity for gains in fitness. The timing of the sessions, in the last hour of the day, parallels the "worst case scenario" of physically demanding tasks which occur at the end of a shift. By training under this "worst case" condition, we maximize the assurance that trainees will develop their fitness capability to handle physically demanding tasks regardless of when in a shift those tasks might occur.

The same basic sequence of exercises is performed within each of the 12 sessions. Over the 12 sessions, however, expected performance levels increase on most of the exercises (e.g., increases are expected in number of repetitions performed, speed of performance, distance achieved, and so forth, as appropriate to the particular exercise). See the Physical Conditioning Guide (Appendix F) for details.

JOB-RELATED FITNESS CAPACITIES ADDRESSED BY THE PROGRAM

The physical fitness capacities determined to be important to performance of the corrections officer position, and hence, as needing to be addressed (assessed and enhanced) by the physical conditioning program, are:

- cardiovascular endurance/stamina
- muscular strength
- muscle endurance
- power/explosive strength
- flexibility
- agility/coordination/balance

See Table 11 for definitions of each of these capacities, and Table 12 for identification of the physically demanding job tasks to which each capacity is particularly relevant.

These performance capacities represent major physical abilities factors commonly identified as important ones in research on physical performance requirements (cf. Fleishman, 1964; Hogan, 1984). Similarly, the capacities, and their task linkages, show a high degree of overlap with the capacities and task linkages identified in analyses of other CO and closely related positions (e.g., Berkley, 1983; Berner & Kohls, 1982; Krueger, Berner & Bernauer, 1985; Terra & Bach, 1981).

LINKAGES OF FITNESS CAPACITIES TO TASKS

The fitness capacities that are called upon in the performance of any particular task are influenced by the manner in which the task is performed (e.g., the duration, speed, and intensity of task performance, plus the extent to which performance of this task tends to follow, in close succession, the performance of other physically demanding activities).

In Table 12, the triple Xs identify fitness capacities which almost always will be called upon in performing the given physically demanding task in conformance with typical statewide minimum performance standards. The Xs in parentheses identify linkages which are more contingent upon the manner in which the task is performed, but are still likely to be commonly enough involved that improvement in those capacities could be expected to improve effectiveness in task performance (and, conversely, limitations in those capacities could be expected to hamper task performance). The absence of a

TEXT CONTINUES ON PAGE 54

Table 11

Definitions of Job-Related Physical Fitness Capacities

CARDIOVASCULAR ENDURANCE/STAMINA:

- ability to perform prolonged bouts of aerobic work without experiencing fatigue or exhaustion
- distinguished by: total body involvement (vs. localized function), cardiovascular (vs. skeletal) functioning, and relatively long-term work (more than three minutes at a stretch).

MUSCULAR STRENGTH:

- ability to exert maximum muscular force for a brief period of time
- includes arm, back, abdominal, shoulder, and leg strength
- does not include resistance to fatigue

MUSCLE ENDURANCE:

- ability to exert muscular force repeatedly or continuously over time
- emphasis on resistance of the muscles to fatigue
- involved in propelling, supporting, or moving the body repeatedly, or supporting it for prolonged periods

POWER/EXPLOSIVE ENERGY:

- ability to expend a maximum of energy in one or a series of thrusts
- important where short bursts of physical effort are required either to propel one's own body weight or external objects

FLEXIBILITY:

- ability to extend trunk, arms, or legs through a range of motion
- involved in tasks that require suppleness, such as reaching and stretching

AGILITY/COORDINATION/BALANCE:

- ability to coordinate the simultaneous actions of different parts or limbs of the body when the body is in motion, and to maintain balance when external forces act against stability.
- involved in most motions, but to a greater degree in complex and/or rapid movement sequences

TABLE 12

CORRESPONDENCE MATRIX FOR CO FITNESS CAPACITIES, TASKS, AND EXERCISES

	Cardiovascular Endurance	Muscular Strength	Muscular Endurance	Power/ Explosive Strength	Flexibility	Agility/Coordination Balance
Tasks/Standards						
Walk/stand	XXX		XXX			
Pursue		XXX		XXX		
Run (walk/jog) to emergency				XXX		XXX
Restrain alone		XXX		X	(X)	
Restrain with assistance		XXX		X	(X)	
Separate with assistance		XXX		X	(X)	
Defend self				X	(X)	XXX
Search	(X)		(X)		XXX	XXX
Carry alone		XXX				XXX
Lift and carry with assistance		XXX	XXX			XXX
Drag		XXX		XXX		
Exercises						
Arm circles					XXX	
Side Bends					XXX	
Windmills					XXX	XXX
Trunk twists					XXX	
Calf stretches					XXX	
Quad stretches					XXX	
Knee hugs					XXX	
Stride stretches					XXX	XXX
Stomach flutter kicks			XXX		XXX	
Knee to forehead			XXX		XXX	
Push-ups		XXX	XXX			
Sit-ups		XXX	XXX			
Side leg raises			XXX			
Vertical jumps				XXX		
Leg presses or modified wall sits		XXX	XXX			
Wrist curls		XXX				
Arm curls		XXX				
Jump & duck						XXX
*Stretcher carries		XXX	XXX			XXX
*Dummy drags		XXX		XXX		
*Airpack carries		XXX		XXX		XXX
*Stair walks	XXX			XXX		XXX
*50-yard sprints		XXX		XXX		
Long-distance walk/jog	XXX		XXX			

* indicates exercises which include a benchmark minimum
XXX consistent linkage

designated linkage does not imply that a given capacity is never relevant to a given task, but rather that the capacity is not likely to be commonly involved in the performance of that task. For example, for the tasks involving restraining inmates, Table 12 indicates that muscular strength is almost always involved and flexibility is commonly involved; there still may well be particular restraint incidents which call for any or all of the remaining fitness capacities (endurance, power and/or agility), but this is not expected to commonly be the case.

Overall, a conservative approach was adopted in linking fitness capacities to tasks. Even so, many multiple connections are evident in Table 12. All tasks are identified as at least commonly related to at least two fitness capacities and all fitness capacities are identified as at least commonly relevant to at least two tasks.

EXERCISES COMPRISED BY THE PROGRAM

Each one hour session in the physical conditioning module comprises a series of 24 exercises, plus a five-minute cool-down period. The exercise schedule is:

A. Ten minutes as a full group doing: arm circles, side bends, windmills, trunk twists, calf stretches, quad stretches, knee hugs, stride stretches, stomach flutter kicks, knee to foreheads, push-ups, sit-ups, side leg raises, and vertical jumps.
B. Twelve minutes rotating through stations for: leg presses (or modified wall sits), wrist curls, arm curls, jump and ducks, stretcher carries, and dummy drags.
C. Eighteen minutes rotating through stations for: airpack carries, stair walks, and 50 yard sprints.
D. Fifteen minutes of long distance walking/jogging.
E. Five minutes of cool-down.

For details on the exercises, refer to the Physical Conditioning Guide in Appendix F.

LINKAGE OF EXERCISES TO FITNESS CAPACITIES

Each exercise serves to address one or more of the major job-related fitness capacities. The exercises are listed, and their relationships to the fitness capacities identified, in the lower half of Table 12. Thus, by reviewing Table 12, the reader can see both the tasks and the exercises linked to each of the job-related fitness capacities.

With one exception (the "jump and duck" exercise), all of the exercises are ones which either are traditionally associated with their designated fitness capacities in the broader literature on physical abilities testing and conditioning, or are close parallels to work sample types of tests which have been used in measuring these types of capacities in testing and training programs for other CO and closely related positions. (The best references are the ones cited previously, plus Hogan & Quigley, 1984.) Thus, a broad base of validity support attests to the usefulness of this sequence of exercises for addressing (assessing and enhancing) the important physical fitness capacities for the corrections officer positions.

For the "jump and duck" exercise, we were able to find no close parallel, and hence no direct validity support, in the broader literature. Nevertheless, this exercise was strongly recommended by our expert panel of exercise physiologists as valuable for building the agility, coordination, and balance which is typically called for in application of self defense techniques of the type addressed elsewhere in the Corrections Officer Core Training Course. Given the strength of the panel's recommendation on this exercise, and the extent to which their other recommendations proved to be supported by the broader literature, the "jump and duck" exercise has been retained as a part of the program and is expected to prove an effective component.

PROGRAM PERFORMANCE OBJECTIVES AND TESTS

Nine performance objectives are specified for the physical conditioning module. All nine define exercises to be performed as part of each one hour conditioning session; and all nine serve the overall program goals of fitness improvement (enabling trainees to improve their job related physical fitness capacities) and carry over (teaching a personal fitness routine which trainees can, if they choose, continue independently on an ongoing basis).

Additionally, five of the nine performance objectives serve the program's assessment goal (enabling instructors to determine whether trainees have the physical fitness capacities necessary to meet typical minimum performance standards). The exercises associated with these five performance objectives are ones with close parallels to particular physically demanding job tasks which have typical minimum performance standards with verified statewide applicability. These minimum task performance standards are translated into benchmark minimum performance levels on the exercises, enabling the exercises to be used as highly content valid and credible tests of trainees' ability to meet or exceed typical minimum fitness requirements for the job. The exercises with benchmark minimums are designated in Table 12.

Table 13 lists the nine specific performance objectives defined for the physical conditioning module; outlines the time allowed for performance of the exercises associated with each objective; and stipulates whether performance relative to that objective is to be tested, and, if so, identifies the benchmark minimum performance level for the exercise and specifies the task performance standard from which that benchmark minimum is derived.

Table 13
Design of the Physical Conditioning Sessions:
Performance Objectives and Associated Exercises/Tests and Time Allowances

Objective 1: Perform a series of 14 short duration (30-60 second) exercises enhancing flexibility, agility/coordination, and muscular strength, endurance, and power.

- Exercises include: arm circles, side bends, windmills, trunk twists, calf stretches, quad stretches, knee hugs, stride stretches, stomach flutter kicks, knee to forehead, push-ups, sit-ups, side leg raises, and vertical jumps.
- Time allowed: 10 minutes.
- No test.

Objective 2: Perform a series of four short duration (30-60 second) exercises enhancing whole-body agility/coordination plus grip, arm and leg strength. Rest briefly (30-60 seconds) between exercises.

- Exercises include: jump and duck, wrist curls, arm curls, and leg presses or modified wall sits.
- Time allowed: 8 minutes.
- No test.

Objective 3: Demonstrate/enhance ability to lift and carry, with a partner, a 165-pound weight on a stretcher for a distance of 75 feet or more.

- Exercise: Dummy Lifts. Lift and fully support a weighted bag hung from above by a rope or chain.
- Time allowed: 2 minutes.
- Test. Benchmark minimums: Support the weight of a 165 pound hanging bag for at least 30 seconds, lifting sufficiently to create and maintain slack in the chain/rope from which the bag is suspended.

  Associated task/standard from Table 10: K (lift and support heavy objects).

Objective 4: Demonstrate/enhance ability to quickly drag a 165-pound bag or dummy by the handle or strap for a distance of 20 feet or more over a carpeted or flat mowed grass surface.

- Exercise: Dummy drags. In 30 seconds, drag a 165-pound dummy/duffle bag as far as possible, rest briefly (30-60 seconds), repeat.
- Time allowed: 2 minutes
- Test. Benchmark minimum: In 30 seconds, drag the 165-pound bag or dummy at least 20 feet. (This corresponds to dragging the bag/dummy at a pace corresponding to a very slow walk).

  Associated task/standard from Table 10: L (drag heavy objects).

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Objective 5: Demonstrate/enhance ability to walk briskly 75 feet or more while carrying a 30 pound airpack or weighted backpack.

- Exercise: Airpack carries. Wearing a 30-pound airpack or weighted backpack, walk briskly back and forth through a 25 yard course as many times as possible within 30 seconds. Repeat as often as time allows, resting briefly (30-60 seconds) between repetitions.
- Time allowed: 6 minutes.
- Test. Benchmark minimum: Wearing the 30-pound airpack/backpack, walk a total distance of at least 75 feet (three 25-foot laps) within the 30 seconds. (This corresponds to a pace equivalent of at least a moderate walk).

Associated task/standard from Table 10: I (carry heavy objects by yourself); also, C (run to the scene of an emergency).

Objective 6: Demonstrate/enhance ability to walk briskly or jog 150 feet through a course which includes climbing up and down a short flight of steps.

- Exercise: Stair walks. Walk briskly or jog 15 yards, climb back up and back down one flight of ten steps, and walk briskly or jog back to the starting point. Repeat. Rest briefly (30-60 seconds) between repetitions if benchmark minimum was not met.
- Time allowed: 6 minutes.
- Test. Benchmark minimum: Complete the full course (15 yards to steps, 10 steps up and down, 15 yards back to starting point) within 30 seconds.

Associated task/standard from Table 10: C (run to the scene of an emergency).

Objective 7: Demonstrate/enhance speed in sprinting a distance of 50 yards on a straight track.

- Exercise: 50-yards sprints. From a standing start, run 50 yards as quickly as possible over a straight track.
- Time allowed: 6 minutes.
- Test. Benchmark minimum: Complete the 50 yard sprint within 20 seconds (i.e., at a pace on the borderline between a fast jog and a slow run).

Associated task/standard from Table 10: B (pursue inmate on foot, running).

Objective 8: Enhance cardiovascular endurance by walking briskly, jogging or running around an oval track for a continuous period of 15 minutes.

- Exercise: Long distance walk/jog.
- Time allowed: 15 minutes.
- No test.

Objective 9: Cool down; slow the heart rate down and stretch out the primary muscle groups.

- Exercises: Walk at a comfortable pace for three minutes and then perform two minutes of stretching exercises (calf stretch, quad stretch, trunk twists, and wind mills).
- Time allowed: 5 minutes
- No test.

LINKAGE OF FITNESS CAPACITIES TO PERFORMANCE OBJECTIVES AND TESTS

With the exception of flexibility, each of the job-related fitness capacities is addressed by exercises associated with both tested and untested performance objectives.

Flexibility is extensively addressed by the conditioning program (linked to a total of 10 different exercises), but is not directly addressed by any of the tested performance objectives. In part, this is because flexibility is an especially difficult capacity to measure through anything but an extensive series of muscle-specific tests or exercises (cf. Hogan, 1984). Also the one task to which flexibility is almost always relevant (searching) is not one which proves amenable to the construction of a valid, credible, and administratively feasible work sample exercise. Our expert panel of exercise physiologists was unable to design a searching simulation which they could judge to be sufficiently valuable to justify the time required; nor, in our broader search of the literature, were we able to find any simulations of searching tasks used as a part of any other physical ability testing or training programs.

Given the difficulty of testing flexibility through simulation of a searching task, one is left with testing it through simulations of the other four types of tasks to which it is commonly important: self defense and inmate restraint tasks (see Table 12). However, such simulations are included already in other modules of the core training course (modules within unit 6.0: Assaultive Behavior and Restraint Techniques). Thus, although flexibility is not addressed through tested performance objectives in the physical conditioning module, it is addressed through tested performance objectives in other modules of the program.

FINAL COMMENTS ON TESTED PERFORMANCE OBJECTIVES: VALIDITY AND COMPREHENSIVENESS

Validity

Each of the tested performance objectives in the physical conditioning module has strong content validity support for use in assessment of the job-related physical fitness of corrections officer trainees. Each is measured through an exercise in which both the nature and the minimum level of performance required are direct parallels of tasks which must be performed, and typical minimum standards which must be met, on the job.

In some cases, translation of task performance standards to exercise benchmark minimums entailed associating terms such as "walking briskly", "jogging", and "sprinting" with concrete speeds. Those translations are based on the following associations, defined by our expert panel of exercise physiologists based on general population norms:

- walking briskly = 1 mile in approximately 15 minutes
- jogging = 1 mile in 10-15 minutes
- sprinting/running = 1 mile in less than 10 minutes

Where these translations would have resulted in benchmark minimums with unusual distances or time limits, numbers were rounded, in the easier direction, to an even multiple of five (e.g., from 17 seconds to 20 seconds) in defining the final benchmark minimums.

Comparison of these benchmark minimums to norms and standards from other physical conditioning and testing programs (e.g., Berner & Kohls, 1982; Krueger, Berner & Bernauer, 1985; Terra & Bach, 1981) confirms that the performance levels required are indeed minimal ones. This is appropriate, indeed essential, for consistency with the assertion that these benchmark minimums are accurate translations of the typical minimum performance requirements (lowest common denominators) across participating agencies in the STC program.

In line with the second major goal of the physical conditioning program, that of enabling trainees to improve their job related physical fitness capacities, instructors are expected to encourage trainees to perform as well as they can on all exercises and to strive to continually improve their performance levels over the duration of the program. That the minimum acceptable performance levels are relatively low ones in no way implies that the desirable performance levels are equally low. Trainees will be encouraged to exceed the minimum requirements in the conditioning program, just as they will be encouraged on the job to do more than simply meet minimum requirements.

Comprehensiveness

Given that each of the tested performance objectives, taken individually, has well documented validity for assessment of trainees' capacities to meet particular physical performance requirements of the job, questions can still be raised about the extent to which the full set of tested performance objectives is comprehensive in its coverage of the physical requirements of the job. This is the final question to be addressed here before moving on to Chapter VII: "Conclusions and Recommendations Regarding the Physical Conditioning Module."

The primary comprehensiveness question is whether all of the job related physical fitness capacities are addressed by tested performance objectives. As discussed previously, (in the "Linkage of Capacities to Performance Objectives and Tests" part of this chapter), when the tested performance objectives of this physical conditioning module are combined with those from the self defense and restraint techniques modules, comprehensive coverage of all six of the job-related physical fitness capacities is achieved. Thus, the primary criteria for comprehensiveness is met.

A secondary question with respect to comprehensiveness is the extent to which the simulations entailed in the tested performance objectives tap all of the major physically demanding job tasks for which physical performance standards have been established. There are 11 physically demanding core tasks for which job performance standards have been established here (see Table 10). Of those 11 tasks, the five dealing with running, carrying, and dragging are directly simulated by tests in this physical conditioning module, and the four tasks dealing with self-defense and restraint of inmates are simulated to at least some extent by tests in the self-defense and restraint module. This leaves only 2 tasks which are not simulated through tested performance objectives: walking or standing for long periods of time, and searching areas that are not easily accessible. Overall then, the secondary criteria of comprehensive simulation of critical job tasks also can be seen to be met to a high degree.

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VII. CONCLUSIONS AND RECOMMENDATIONS REGARDING THE PHYSICAL CONDITIONING MODULE

CONCLUSIONS

The physical conditioning module designed for inclusion in the Corrections Officer Core Training Course:

- Provides a highly job-related means of both assessing and improving the physical fitness of corrections officer trainees.
- Defines, for selected exercises representing close simulations of a range of physically demanding CO job tasks, benchmark minimum performance levels that correspond to typical state-wide minimum requirements for Corrections Officer performance on the tasks simulated by the exercises.
- Provides, through those benchmark minimums, a post selection standard which agencies may require trainees to meet as a prerequisite condition to placement in the corrections officer position (i.e., use as post selection but pre-placement "tests" that trainees must pass).

Use of the exercise benchmark minimums as a pre-placement screening device:

- Can be strongly defended on the grounds of content validity as long as the hiring agency's minimum on-the job performance requirements on the relevant tasks are at least as high as the minimum requirements typical of agencies participating in the STC program (i.e., meet or exceed the typical minimum standards reported in Table 10 of this report).
- Will have validity and effectiveness for assessing job-related physical fitness which is at least equal to, and probably substantially better than, the validity of any pre-employment, pre-training physical abilities tests.
- Will produce substantially less adverse impact against protected groups than would any physical abilities tests used on a pre-training basis.
- Will be in conformance with all relevant state and federal law with respect to equal employment opportunity for the physically handicapped, women, and other protected groups, as long as the use of the benchmark minimums is done in conformance with the recommendations provided below.

The Federal Uniform Guidelines require that, in choosing between alternative employment procedures of comparable validity, an employer adopt the one with the least adverse impact against protected groups unless there are compelling business necessity reasons for doing otherwise. We are unaware of any compelling business necessity reasons that would be sufficient to justify a state wide standard calling for pre-employment physical abilities testing of corrections officer candidates for local agencies as an alternative to the training and testing approach presented here. For any individual local agency, however, such compelling business necessity reasons may exist. Thus, our conclusion that pre-employment physical abilities testing is inappropriate as a state wide standard issued by the Board of Corrections does not, and is not intended to, exclude the possibility that such pre-employment physical abilities testing may be appropriate for individual local agencies. Similarly, this conclusion cannot be assumed to generalize to other employers of corrections officers (e.g., the State correctional system) where the nature and level of the physical abilities required on the job may be quite different than the typical minimums that apply across the many local agencies for which the Board of Corrections is responsible for setting standards.

RECOMMENDATIONS

For the purpose of assuring that new corrections officers have the physical abilities necessary to meet the physical demands of the job, we strongly recommend the inclusion of this physical conditioning module in the Corrections Officer Core Training Course. We also strongly recommend the use of the module as a basis for teaching trainees a personal fitness routine which they can subsequently pursue on their own (after placement in the corrections officer position), to continue to maintain and improve their job related physical fitness. Finally, as an alternative to pre-employment physical abilities testing, we strongly recommend the use of this module for the purpose of determining whether prospective corrections officers have the physical fitness capacities necessary to meet job requirements.

If the physical conditioning module is adopted, we strongly recommend that it be coupled with a medical screening prerequisite, as described in Chapter IV of this report. (See also the sample medical screening form and physician guidelines in Appendix E.)

Before a local agency adopts the benchmark minimum exercises as a prerequisite to placement in the corrections officer position, it should document that the typical minimum performance standards on which those benchmark minimums are based (See Table 10) are no higher than its own minimum requirements. If the local requirements are lower than the typical state wide minimums, the exercise benchmark minimums should be reduced accordingly before being used as a prerequisite to placement. Further, trainees who do not meet all of the benchmark minimums are not to be automatically disqualified from placement in the corrections officer position. This situation must be handled on a case by case basis. In deciding how to handle each such situation, the following questions need to be addressed:

- Is additional practice likely to bring the trainee's performance up to the benchmark minimums? If so, and if additional practice time is administratively feasible, the trainee should be given that opportunity.

- Can the facility make reasonable accommodation for a corrections officer who may be unable to meet minimum performance standards on the particular tasks associated with the benchmarks in question? In comparison to other core tasks of the corrections officer position, physically demanding tasks tend to have low relative frequency and importance. Thus, it may well be feasible (and worthwhile) for the facility to make reasonable accommodation for a trainee who has weaknesses in specific physical abilities, but is otherwise expected to be a satisfactory performer. If reasonable accommodation is feasible, an employer is legally required to provide it.

Only if both of these options fail to provide a solution to the problem should a trainee be disqualified ("fail") on the basis of poor performance on one or more of the benchmark minimum exercises.

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APPENDIX A

CORRECTIONS OFFICER PHYSICAL ABILITIES EVIDENCE FROM CRITICAL INCIDENTS

Part 1:	Critical Incidents Involving Physical Abilities
Part 2:	Performance Dimension Definitions and Effectiveness Scale for Rating CO Critical Incidents
Part 3:	CO Performance Rating Scales Developed from Critical Incidents for Use of Force/Restraints and Handling Emergencies/Crises

APPENDIX A
Part 1

CORRECTIONS OFFICER
PHYSICAL ABILITIES CRITICAL INCIDENTS

Dimension	Effectiveness		
E	3.9	* 3.	When this CO observed a female CO intervening between two fighting inmates, he stepped in front of the inmate who was holding a pool stick. When the inmate would not comply with a request to put the stick down and come to the office, the CO shoved him in the stomach, and knocked him against the wall. The inmate then went to the office.
E	2.8	* 4.	When this CO was confronted with a violently angry inmate who had been told that he was being moved to a maximum security facility, he applied the restraint gear himself, even though other staff were available.
E	1.5	5.	When this CO was assigned to hold an inmate's arm and hand so that another CO could apply handcuffs, he loosened his grip for a moment. The inmate pulled free, and injured three COs before being subdued again.
G	1.6	* 20.	When an inmate in the pre-booking holding cell was screaming obnoxiously at this CO, he ran over to the holding cell, grabbed the inmate, placed him in a choke hold, and dragged him into a safety cell.
F	6.8	44.	When this CO responded to an "inmate down", the inmate was not breathing and had no pulse. The CO then applied CPR, and revived the inmate.
E	5.7	57.	When this CO encountered an aggressive inmate in inmate reception, he used the proper restraint (rear wrist lock) and subdued the inmate.
E	1.6	* 61.	When an arrestee that this CO was searching became verbally (but not physically) aggressive, this CO applied a carotid hold, and forced him to the floor without speaking to him.

*These critical incidents were noted to involve abilities coupled with poor judgment. The physical actions were probably unnecessary and/or not an actual part of the job.

Dimension	Effectiveness		
E	1.1	* 62.	During a routine booking, this CO subdued a hostile inmate by striking him in the solar plexus and repeated blows to the head, even after he was subdued.
G	1.3	* 77.	Because the incoming booking was following this CO's directions but in a hostile, foul-mouthed manner, the CO lost his temper and shoved booking into the wall, causing him to cut his forehead.
F	3.2	87.	When this CO was called to the housing unit to break up a fight, he ran, then slipped and fell on the wet cement floor.
E	6.5	106.	When an inmate who was being photographed suddenly lunged at this CO, he caught him in mid-air and quickly put his handcuffs back on, subduing the inmate without injury or further struggle.
E	7.0	108.	When called to assist with subduing a man under the influence of PCP, this CO thought to bring extra cuffs and a stokes basket to the scene. He then assisted with cuffing the individual into the basket.
F	7.2	110.	While making a routine module check, this CO spotted an ace bandage tied to the upper bars of an isolation cell. He went to the cell immediately and found the inmate hanging from the bars. He then called for help and held the inmate's weight until assistance arrived.
C	6.8	112.	While working the main control post, this CO received a phone call from the mother of an inmate. She said that her son had just called and told her that he was depressed. The CO then called the west module officer, who went directly to the inmate's cell, and found him hanging by his neck. The officer immediately cut him down, thereby saving his life.
E	5.8	*132	When he was having difficulty in controlling an intoxicated inmate, this CO placed an arm bar control on the inmate, and escorted her to a safety cell without injuring himself or the inmate.

*These critical incidents were noted to involve abilities coupled with poor judgment. The physical actions were probably unnecessary and/or not an actual part of the job.

Dimension	Effectiveness		
H	1.8	*173.	When an inmate on bail for a property crime ran out of the court room and down the street, this CO chased him and shot at him twice, but did not retake the inmate.
E	6.5	178.	When a patrol officer entered the facility with an inmate that had to be restrained, this officer noted that he needed assistance and wasted no time in giving it. He acted very professionally, without using unnecessary force.
E	6.3	192.	While supervising inmates in an open housing area, this CO was attacked from behind by a large inmate. She was able to regain control by using the special defensive tactics which she practiced regularly.
C	7.1	219.	When acting as escort officer in the intake area, this deputy observed an inmate bend down and remove a knife from his shoe during an argument with the booking officer. The CO tackled and handcuffed the inmate.
F	7.3	221.	When an elderly inmate became unconscious and stopped breathing, this CO immediately began CPR and mouth-to-mouth, rather than waiting for the medical staff to take charge.
B	5.8	225.	While routinely searching an inmate returning from pass, this CO asked the inmate to remove his shoes and knock them together, and narcotics were found.
F	2.3	226.	When a fight erupted in camp, this CO requested assistance via radio, but failed to give the exact location, resulting in a delay.
A	1.2	*243.	Rather than counting each body and checking each room, this CO counted management cards and called their number in as a body count.
F	1.1	*268.	When the requested help arrived to assist this CO break up a gang fight in a 20-man cell, he left the scene.

*These critical incidents were noted to involve abilities coupled with poor judgment. The physical actions were probably unnecessary and/or not an actual part of the job.

Dimension	Effectiveness		
F/A	1.4	*272.	This CO was supervising a module when a fight broke out. Contrary to procedure, he failed to notify control, and attempted to break up the fight without assistance, jeopardizing his security and that of the facility.
E	2.8	*277.	When assisting an arresting officer with a hostile inmate, this CO fought with the inmate, who was then subdued with the arresting officer's help. The officer then reported, both orally and in the incident report, that the inmate hit his head on the vehicle bumper.
F	1.0	*320.	While removing a violent inmate from a cell, this CO did not request back-up. He entered the cell by himself, and then continued to beat the inmate after he had been subdued.
F	6.8	333.	When he found an inmate hanging by a bedsheet, this CO hit the panic phone, yelled to a nearby trusty to go get help, opened the cell door, cut the inmate down, and began CPR, saving the man's life.
F	5.4	347.	When an entire cell block began screaming, yelling, and rattling bars, this CO, along with three others, went down the cell block, and removed and separated the troublemakers. The CO then explained that any further noise would result in severe punishment.
F	6.1	348.	When an inmate who was in possession of contraband ran off after being directed to stop, this CO gave chase and radioed for assistance. He relayed detailed information, and continued to update the location as the inmate ran through the camp, making it possible for assistance to arrive quickly.
E	1.0	*350.	When an inmate refused to leave the day room, this CO called for assistance and four officers arrived to help. After the inmate was restrained and cuffs were being put on him, this CO punched the inmate several times in the face.

*These critical incidents were noted to involve abilities coupled with poor judgment. The physical actions were probably unnecessary and/or not an actual part of the job.

APPENDIX A
Part 2

CORRECTIONS OFFICER
PERFORMANCE DIMENSIONS

For Rating Performance Examples

A. MAINTAINING SECURITY

Maintaining the security of the facility and inmates: conducting counts properly and efficiently: keeping doors, etc. locked, operating doors from control; maintaining the security of facility keys; ensuring that inmates are where they should be and not where they shouldn't be; verifying the identity of inmates, for example, before releasing and verifying the identity of visitors.

B. SEARCHING

Using effective search procedures; inspecting food, mail, packages for contraband; searching cells, dorms, halls, yard, and other facility areas for contraband and taking appropriate action when found.

C. ALERTNESS TO POTENTIAL PROBLEMS

Being alert to signs of potential danger or disturbance; noticing sounds or subtle changes in inmate behavior or conversation that might indicate some kind of trouble, and taking the appropriate steps to prevent the trouble; investigating suspicious activity or situation; recognizing signs of suicidal tendency. insulin shock, etc. and taking appropriate action.

D. KEEPING/CHECKING RECORDS

Performing all paperwork necessary for the correct and efficient operation of the facility: reviewing court documents, figuring release dates correctly; running warrant checks; logging daily activities or incidents; logging inmates' property and money and correctly returning same on release; writing reports, such as escape reports, and others, that are clear, complete, and concise.

E. USE OF FORCE/RESTRAINTS

Using the appropriate physical force, restraints (cuffs, etc.) or weapon for the situation; skillfully applying self-defense techniques when necessary; using the proper procedure to subdue inmates; recognizing when force is required and using proper amount (being careful not to use excessive force when it is inappropriate).

CONTINUED

F. HANDLING EMERGENCIES/CRISIS

Remaining calm and taking appropriate actions in emergency or crisis situations such as fire, injury, suicide attempt, escape, or fighting inmates; sounding or responding to an alarm with the proper procedure.

G. DEALING WITH HARASSMENT

Responding calmly and appropriately to verbal harassment or uncooperativeness; maintaining self-control in the face of harassment or intimidation; not responding to harassment with threats of violence or foul language, but with reasoning and patience, and taking any appropriate disciplinary actions.

H. INTERACTING WITH INMATES

Displaying a concern for inmates' health and general well being, showing respect for inmates' rights and privileges; treating inmates fairly and consistently; communicating effectively with inmates, gaining their cooperation; listening and responding, when appropriate, to inmates' questions, concerns, complaints; following through on inmate requests and helping them work out problems when appropriate.

I. INTERACTING WITH CO-WORKERS

Getting along with co-workers, supervisors, and other criminal justice personnel; communicating effectively with other officers; keeping others completely informed of things they should know; assisting/supporting other officers when needed or when requested to do so; helping train new officers.

J. COMMITMENT TO JOB

Demonstrating commitment to the job and respect for the facility's policies and procedures: putting in more time and effort than required versus just doing enough to get by on the job; doing things to improve the operation or the "image" of the facility on one's own time and/or initiative versus not pulling one's fair share of the work load, for example, by sleeping on the job or abusing sick leave.

Effectiveness Rating Scale

1 2 3 4 5 6 7 8 9

INEFFECTIVE	PASSABLE	GOOD	VERY GOOD	EXCELLENT
clearly substandard, inadequate unacceptable	barely adequate, considerable room for improvement	fully adequate, average for COs	above average better than expected of most COs	superior outstanding performance

Appendix A
Part 3

CORRECTIONS OFFICER PERFORMANCE RATING SCALES DEVELOPED FROM CRITICAL INCIDENTS FOR USE OF FORCE/RESTRAINTS & HANDLING EMERGENCIES/CRISES

E. USE OF FORCE/RESTRAINTS

Recognizing when physical force is required to subdue an inmate and using it appropriately; using the proper restraint device (e.g., handcuffs) or weapon for the situation; using self defense techniques skillfully.

1 2 Needs Improvement	3 4 5 Fully Adequate	6 7 Excellent
. Uses physical force to restrain inmates when it is not necessary; may strike inmates after they have been subdued. . Tries to handle violent inmates without requesting proper assistance. . May not hold inmate's arms firmly enough when restraining gear is being applied.	. Requests appropriate assistance before trying to handle combative inmates. . Uses physical force only when it is necessary to subdue an inmate; uses the appropriate restraints (handcuffs, for example), and doesn't remove them until sure the inmate is no longer combative. . Is fully capable, with the proper assistance, to subdue combative inmates.	. When dealing with inmate, always uses the minimum physical force required; takes care to use techniques which do not harm self or the inmate. . Has the foresight to bring handcuffs and any other needed restraining devices (for example, a stokes basket) to the scene of a disturbance; uses restraining devices skillfully. . Using special self defense techniques very skillfully.

F. HANDLING EMERGENCIES/CRISES

Remaining calm and taking appropriate actions in emergency or crisis situations such as fire, injury, suicide attempt, escape, or fighting inmates; sounding or responding to an alarm with the proper procedure.

1 2 Needs Improvement	3 4 5 Fully Adequate	6 7 Excellent
. May not respond to the "panic alarm" if, for example, he/she is on the phone; may freeze or panic in emergency situations. . Fails to notify control, sound an alarm, or call for assistance, and instead tries to handle the emergency (for example, a fire or a fight) alone; when requesting assistance, may not give exact information as to location. . Doesn't know what to do when he/she encounters a wounded inmate or an inmate who has attempted suicide.	. Calmly orders fighting inmates to stop and calls for help in breaking up fights. . Responds to alarms without delay; sounds alarms or calls for assistance before trying to deal with an emergency alone; gives detailed and accurate information when radioing in an emergency. . Upon finding an injured inmate, calls for help and uses proper first-aid procedures.	. Remains very calm and calms others in an authoritative manner during a crisis; anticipates equipment which may be needed and brings it to the site of the emergency (for example, brings a breathing apparatus to the site of a fire). . Upon sighting an emergency, sounds the alarm immediately and leads or directs others accurately to the location. . Is very skillful at administering CPR and/or mouth-to-mouth resuscitation as needed when inmates are injured or have attempted suicide; supports the weight of a hanging inmate until help arrives and/or the inmate can be cut down.

APPENDIX B

CORRECTIONS OFFICER PHYSICAL ABILITIES
EVIDENCE FROM TELEPHONE INTERVIEWS

Part 1: List of Interviewees by County

Part 2: Examples of Quantifiable Response Tallies from the Telephone Survey

Appendix B
Part 1
CORRECTIONS OFFICER
PHYSICAL ABILITIES TELEPHONE INTERVIEWS
LIST OF RESPONDENTS

County	Interviewee
Contra Costa	Forrest Matter
	Wayne Beck
Fresno	Gary Martin
Imperial	Sgt. Gustafson
	Sgt. Romero
Lassen	Sgt. Martin
Los Angeles	Ralph Mendel
	Gary Young
	Sgt. Carrington
	Patty Lewis
Merced	Mike Raymond
Monterey	Robert Grabar
Napa	Robert Vesper
Riverside	Lt. Spain
	Mr. Polk
	Lt. Landy
Sacramento	Neil Watson
San Diego	Sgt. Uno
	Sgt. Walker
San Francisco	Ed Hogan
	Carl Koehler
San Mateo	Lt. Macias
	John Gaspari
	Jerry Restrain
Santa Cruz	Charlie Weaver
Shasta	Mike Slitter
Siskiyou	Jim Sewell
Sonoma	John DeWitt
Ventura	Sgt. Cunningham
	Sgt. Funchess
Yolo	Sgt. Larry Justice

Appendix B
Part 2

Examples of Quantifiable Response Tallies from the Telephone Survey

Walking and Standing for Long Periods of Time

How many hours per day?

4 of 8-hour shift	1
5-6 of 8-hour shift	1
6-8 of 8-hour shift	9
8-9 of 10-hour shift	2
10-11 of 12-hour shift	2
depends on job	1

Pursue an Inmate on Foot

How far?

no estimate	7
10 to 25 yards	4
26 to 50 yards	3
500 yards to a few miles	4

How fast?

time/100 yards

no estimate	7
15 to 20 seconds	3
21 to 30 seconds	4
more than 30 seconds	1

What obstacles?

fence	3
rough terrain	2
sports equipment	2
steps	1
doors	1
railroad tracks	1

Run to Emergency

How far?

10 to 20 yards	4
40 yards	1
50 to 60 yards	4
75 yards	1
100 to 400 yards	6

What obstacles?

stop to unlock, open and close doors	8
1 flight of stairs	7
2 or more flights of stairs	3
chairs	5
tables	3
beds	2
slippery floor	2
fence	1

Operate Difficult-to-Open Doors Manually

What behavior is needed?

none- all easy to open	6
crank with arms for 10 seconds	2
use full body weight	2
pull with arms	1
snap of the wrist	1
coordination	1

Physically Separating and Restraining/Subduing Inmates*

*interviewees tended to combine these tasks

How long to separate/restrain?

3 to 5 seconds	1
5 to 10 seconds	1
10 to 30 seconds	3
20 seconds to 2 minutes (includes holding after restraining/separating)	3

Searching

What is physically involved?

bend	8
reach	5
climb ladder, chair, etc.	5
look around	4
down on knees	4
walk	2
roll up mattress	2
squat	1

Carry/Lift/Drag/Push Heavy Objects*

* respondents tended to combine these tasks

What kind of equipment?

day-to-day	
none or inmates do it	10
typewriter	2
80 lb sack of beans	1
supplies (35 to 40 lbs)	1

emergency equipment	
airpack (20 to 70 lbs)	9
fire extinguisher (20 to 40 lbs)	3
fire hose	2

emergency-inmate	
call medics- do not move	8
2 person or more- stretcher carry	8
drag inmate alone	2
inmates carry	1
show effort to move	1

APPENDIX C
EVIDENCE FROM THE CO PHYSICAL PERFORMANCE STANDARDS VERIFICATION SURVEY

Part 1: Sample Verification Survey (with cover letter)
Part 2: Tallies of Responses from CO Verification Survey

April 23, 1985

Dear ____________________:

Enclosed is a 15-item survey regarding physical performance requirements for corrections officers. The information obtained will be used in conjunction with data that has been collected over the last year.

I am requesting that at least one first-line supervisor and one male and one female corrections officer complete the survey. They should review the items from the perspective that the physical incident could occur, and with this in mind, the defined standard/requirement meets, exceeds, or is less than that required in their facility. Where the survey asks for a name, they should instead place their sex.

If you have any questions, I can be reached at 916-445-5073. Thanks for your help.

Yours truly,

Charles W. Page, Jr.
Project Manager

CWP:dh

Enclosures

SURVEY TO VERIFY PHYSICAL
PERFORMANCE STANDARDS FOR THE
CORRECTIONS OFFICER (CO) POSITION

Please provide the following identifying information. (Print legibly.)

Your Name (/Sex) ______________________ Title ______________________

Facility Name ______________________ County ______________________

This survey focuses upon standards that correction officers are required to meet when performing the physically demanding parts of their jobs. It asks you to evaluate the accuracy, for your facility, of 15 physical performance task standards that have emerged as typical in California county corrections facilities. Completing the survey should take only about 15 minutes.

The standards in this survey were identified through an extensive job analysis involving:

1. job analysis questionnaires completed by hundreds of CO incumbents and supervisors;
2. in-depth training needs analysis meetings with a panel of nine job experts, carefully selected to be representative of the range of different county facilities; and,
3. individual telephone interviews with experts in 24 different county facilities, which concentrated exclusively on gathering detailed descriptions of the physical performance standards/requirements for COs working in their facilities.

The purpose of this survey is to verify the state-wide accuracy of these typical performance standards/requirements. If verified, the typical state-wide standards for the CO physical performance tasks can provide a basis for incorporating valid physical ability standards into the selection and training of new COs.

Instructions:

Read carefully the typical performance standard/requirement described for each task. Then, for each task, answer the question: Is this standard accurate for your facility? [In other words, if a CO in your facility performed the given task at the level described in the standard, would s/he be meeting your facility's requirements for adequate performance?] Check "Yes" or "No" in the space provided.

If you decide that a standard, as described here, is NOT accurate for your facility, please revise the description of the standard to make it accurate (i.e., check "No", but then show us how to revise the standard to make it accurate). Make the revisions right on the survey or, if more convenient, write them on a separate page and attach the page when you return your survey.

For some tasks, it is reported that no typical standard exists. In those cases, we want to know whether it is accurate, for your facility, that no standard exists for that task. If "no standard" is correct, check "yes". On the other hand, if your facility does have a performance standard/requirement for that task, check "no" and write in a description of the standard.

When you have completed the survey, please return it to Chuck Page at STC. We would appreciate your completing it at your earliest convenience. If you have any questions about the survey, call Chuck Page or your STC consultant.

Thank you very much for your cooperation. The survey questions start on the next page.

Prepared April 1985 by Personnel Decisions, Inc., for the California Board of Corrections, Standards and Training for Corrections Program

VERIFICATION SURVEY: CO PHYSICAL PERFORMANCE STANDARDS

PHYSICALLY DEMANDING CORE TASKS	TYPICAL PERFORMANCE STANDARD/REQUIREMENT	IS THIS STANDARD ACCURATE FOR YOUR FACILITY? (If not, be sure to revise it to make it accurate for your facility)
1. Walk or stand for long periods of time.	Be able to walk or stand for seven hours of an eight hour shift.	___ YES ___ NO (Show how to revise)
2. Pursue inmates on foot (running).	After walking/standing for seven hours of an eight hour shift, be able to pursue a running inmate by: A. Sprinting a distance of 50 yards or more, and B. Maintaining a brisk walk or jog for 500 yards or more.	___ YES ___ NO (Show how to revise)
3. Run to the scene of a disturbance or emergency.	After walking/standing for seven hours of an eight hour shift, be able to walk briskly or jog a distance of 150 feet to the scene of an emergency, including climbing one short flight of stairs (e.g., 20 steps), in a total time of 30 seconds or less.	___ YES ___ NO (Show how to revise)
4. Physically subdue or restrain an inmate by yourself.	After walking/standing for seven hours of an eight hour shift, be able to apply appropriate techniques to physically restrain a resisting individual, by yourself, for at least 30 seconds.	___ YES ___ NO (Show how to revise)
5. Physically subdue or restrain an inmate with the help of another person.	After walking/standing for seven hours of an eight hour shift, be able to apply appropriate techniques to help another officer to: A. Move a resisting individual a distance of 20 feet or more (e.g., away from the scene of a disturbance), and B. Physically restrain a resisting individual for at least one minute.	___ YES ___ NO (Show how to revise)

PHYSICALLY DEMANDING CORE TASKS	TYPICAL PERFORMANCE STANDARD/REQUIREMENT	IS THIS STANDARD ACCURATE FOR YOUR FACILITY? (If not, be sure to revise it to make it accurate for your facility)
6. Physically separate two fighting inmates with the help of another officer.	After walking/standing for seven hours of an eight hour shift, and then walking briskly or jogging 150 feet in response to a call for help, be able to help another officer separate two fighting inmates by approaching one of the inmates from behind, pulling the inmate away, and applying appropriate techniques to restrain the inmate for at least one minute.	___ YES ___ NO (Show how to revise)
7. Physically separate two fighting inmates by yourself.	No standard; this task is frequently proscribed (i.e., is against regulations in many facilities.	___ YES ___ NO (Describe your standard)
8. Defend yourself against an inmate armed with a weapon, disarm and subdue inmate.	After walking/standing for seven hours of an eight hour shift, be able to handle an attacking inmate by verbally de-escalating the situation if possible and, when that is not possible, acting (e.g., using mace) to minimize injury to self and others.	___ YES ___ NO (Show how to revise)
9. Search areas that are not easily accessible for contraband.	After walking/standing for seven hours of an eight hour shift, be able to repeatedly: A. Assume position to look under a bed and visually search the area for contraband; and, B. Step up on a chair and maintain balance while reaching to search high areas.	___ YES ___ NO (Show how to revise)
10. Carry heavy objects with the help of another officer.	After walking/standing for seven hours of a eight hour shift, be able to carry a wall mounted 30 pound Scott Airpack on your back and walk briskly 75 feet or more.	___ YES ___ NO (Show how to revise)

PHYSICALLY DEMANDING CORE TASKS	TYPICAL PERFORMANCE STANDARD/REQUIREMENT	IS THIS STANDARD ACCURATE FOR YOUR FACILITY? (If not, be sure to revise it to make it accurate for your facility)
11. Lift and carry heavy objects with the help of another officer.	After walking/standing for seven hours of an eight hour shift, be able, with the help of another officer, to lift and carry a 165-pound inmate on a stretcher for a distance of 75 feet or more.	___ YES ___ NO (Show how to revise)
12. Drag heavy objects.	After walking/standing for seven hours of an eight hour shift, and walking briskly or jogging 75 feet, be able to apply appropriate technique to quickly drag a 165-pound inmate for a distance of 20 feet or more.	___ YES ___ NO (Show how to revise)
13. Operate difficult-to-operate gates, doors, or locks manually.	No standard; gates, doors, and locks typically are not difficult to open. Those that are difficult vary too much in size and weight to allow specification of a typical performance standard.	___ YES ___ NO (Describe your standard)
14. Push hard-to-move objects by hand.	No standard; when this task is required, assistance almost always is available.	___ YES ___ NO (Describe your standard)
15. Pull yourself up over obstacles.	No standard; alternative ways to accomplish the objective almost always are available.	___ YES ___ NO (Describe your standard)

THANK YOU FOR COMPLETING THE SURVEY.
PLEASE RETURN IT TO CHUCK PAGE AT STC.

CO Verification Survey Responses (6/4/85)

CO ID	Sx	Ps	County/ Facility Task Rating 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Contra Costa- Main Detention																	
1	F	I	1	1	1	1	1	1	*2	1	1	1	1	1	*2	*2	0
2	F	S	1	1	1	1	0	1	1	1	1	1	1	1	*2	1	1
3	M	I	1	1	2	2	1	1	1	1	1	1	2	1	1	1	1
4	M	S	1	2	1	1	1	1	1	1	1	1	2	1	1	1	1
			100	75	75	75	100	100	50 (75)	100	100	100	50	100	50 (100)	75 (100)	75
El Dorado - County Jail / Placerville																	
5	F	I	1	1	2	1	1	1	1	1	1	1	1	2	1	1	1
6	M	I	1	1	1	1	1	1	*2	1	1	1	1	1	*1	1	*1
7	M	S	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
8	F	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			100	100	75	100	100	100	50 (75)	100	100	100	100	75	100 (75)	100	100 (75)
Fresno - County Detention																	
9	F	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10	F	I	1	1	1	1	1	1	0	1	1	1	1	1	1	1	1
11	M	S	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
12	M	I	1	1	1	1	1	1	2	1	1	1	1	1	1	1	1
			100	75	100	100	100	100	50	100	100	100	100	100	100	100	100
Lassen - County Jail																	
13	F	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
14	F	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
15	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
Los Angeles - Central Jail																	
16	F	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17	M	S	1	2	1	1	1	1	*2	1	1	1	1	1	1	1	1
18	M	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			100	75	100	100	100	100	75 (100)	100	100	100	100	100	100	100	100
Monterey - County Jail																	
20	F	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
21	M	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
22	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			100	100	100	100	100	100	100	100	100	100	100	100	100	100	100
San Francisco - County Jails																	
23	M	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
24	M	I	1	2	2	1	1	1	1	1	1	1	1	1	2	1	2
25	F	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
26	M	I	1	*1	*1	1	1	1	2	1	*1	1	*1	1	1	1	1
			100	75 (50)	75 (50)	100	100	100	75	100	100 (75)	100	100 (75)	100	75	100	75

CO Verification Survey Results (6/4/85)

CO County/ Facility

ID	Sx	Ps	Task Rating														
			1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
San Mateo - Women's Correctional Center																	
27	F	I	1	1	1	2	1	1	*0	1	1	1	1	1	0	*0	*0
			100	100	100	0	100	100	0	100	100	100	100	100	0	0	0
									(100)							(100)	(100)
San Mateo - Main Jail																	
28	M	S	1	1	1	1	1	1	*2	1	1	1	1	1	1	1	1
29	M	I	1	1	1	1	1	1	*2	1	1	1	1	1	*2	*2	*2
			100	100	100	100	100	100	0	100	100	100	100	100	50	50	50
									(100)						(100)	(100)	
Siskiyou - County Jail																	
30	F	I	2	1	1	1	1	1	*2	2	1	1	1	1	1	1	1
31	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
32	M	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			67	100	100	100	100	100	67	67	100	100	100	100	100	100	100
									(100)								
Sonoma - County Jail																	
33	F	I	1	1	1	2	1	1	*2	1	1	1	1	1	1	1	*2
34	M	I	1	2	1	2	2	2	*2	2	1	2	2	2	1	1	1
35	M	S	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1
36	M	S	2	1	1	1	1	1	1	2	1	1	1	1	1	1	1
			75	50	100	50	75	75	50	50	100	75	75	75	100	100	75
									(100)								(100)
Stanislaus - County Women's Facility																	
37	F	S	1	1	1	1	1	1	*2	1	1	1	1	1	*2	1	1
38	F	I	1	1	1	1	1	1	*2	1	1	1	1	1	*2	*2	1
			100	100	100	100	100	100	0	100	100	100	100	100	0	50	100
									(100)						(100)	(100)	
Stanislaus - County Men's Jail																	
39	M	I	1	0	1	1	1	1	*2	2	1	1	1	1	*2	*2	*2
40	M	S	1	2	2	1	1	1	1	1	1	2	2	2	1	2	2
			100	0	50	100	100	100	50	50	100	50	50	50	50	0	0
									(100)						(100)	(50)	(50)
Ventura - County Main Jail																	
41	M	I	1	2	1	1	1	1	1	2	1	1	1	1	1	1	1
42	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			100	50	100	100	100	100	100	50	100	100	100	100	100	100	100
Yolo - County Sheriff's Department																	
43	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
44	F	I	1	1	2	1	1	1	*2	1	1	1	1	1	2	1	1
45	M	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
			100	100	67	100	100	100	67	100	100	100	100	100	67	100	100
									(100)								

CO Verification Survey Results (6/4/85)

CO County/ Facility

ID	Sx	Ps	Task Rating 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Santa Cruz - Main Jail																	
46	F	S	1	1	1	1	1	1	*2	1	1	1	1	1	2	*2	*2
47	M	S	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
48	M	I	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1
			100	100	100	67	100	100	67 (100)	100	100	100	100	100	67	67 (100)	67 (100)
Santa Barbara - County Jail																	
49	M	S	1	2	2	1	1	1	*2	1	1	1	2	2	*2	*2	*2
50	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
51	M	I	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
52	F	I	1	2	1	1	1	1	*2	1	1	1	1	1	1	1	1
			100	50	75	100	100	100	50 (100)	100	100	100	75	75	75 (100)	75 (100)	75 (100)

	Standard 1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
Total number of "yes" responses (All respondents, N=52):	50	41	46	47	51	51	31	47	52	50	47	48	41	44	40
Total percentage of "yes" responses:	96	79	88	90	98	98	60	90	100	96	90	92	79	85	83
Females (N=19):															
number	18	18	17	17	19	19	8	18	19	19	19	18	12	15	15
percent.	95	95	89	89	100	100	42	95	100	100	100	95	63	79	79
Males (N=33):															
number	32	23	29	30	32	32	23	29	33	31	28	30	29	29	25
percent.	97	70	88	91	97	97	70	88	100	94	85	91	88	88	76
Incumbents (N=32):															
number	31	27	28	27	31	31	18	28	32	31	30	30	25	27	23
percent.	97	84	88	84	97	97	56	88	100	97	94	94	78	84	72
Supervisors (N=20):															
number	19	14	18	20	20	20	13	19	20	19	17	18	16	17	17
percent.	95	70	90	100	100	100	65	95	100	95	85	90	80	85	85
Counties/Facilities with endorsement rates greater than 50%:															
Number:	17	13 (12)	16 (15)	15	17	17	8 (16)	14	17	16	15	16	12 (16)	13 (16)	14 (15)
Percentage (of 17, total):	100	76 (71)	94 (88)	88	100	100	47 (94)	82	100	94	88	94	71 (94)	76 (94)	82 (88)

Position coded as: I = Incumbent, S = Supervisor

* If respondents' ratings appeared inconsistent with their comments, two endorsement percentages are reported; the first is based on the respondents' rating, the other (given in parentheses) is based on the respondents' comments.

CO Verification Survey Responses (6/4/85)

STANDARD #1: Walk or stand for long periods of time.

CO County/ ID	Facility Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	For 10 out of 12 hours.

Siskiyou - County Jail

30	F	I	2	Stand or walk for 3-4 hours.
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	
34	M	I	1	
35	M	S	1	
36	M	S	2	7 hours of an 8 or 10 hour shift.

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	1	
40	M	S	1	

Ventura - County Main Jail

41	M	I	1	
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	1	9 hours of a 10 hour shift.
50	M	I	1	
51	M	I	1	
52	F	I	1	

50 Total number of "yes" responses
96% Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #2: Pursue inmates on foot (running).

CO	County/			Facility
ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	2	[No revision]
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	2	Approximately 20 yards [for A].
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	2	[No revision]
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	2	'A' only; delete 'B'.
25	F	I	1	
26	M	I	*1	Ok with deletion of 'B'.
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	
34	M	I	2	No standard exists.
35	M	S	2	We do not have this much open area.
36	M	S	1	

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	0	
40	M	S	2	[No revision]

Ventura - County Main Jail

41	M	I	2	This facility confines all inmates within 30 yards of any staff member.
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	2	9 of 10 hours; we are required to keep ourselves physically fit.
50	M	I	1	
51	M	I	1	
52	F	I	2	There's nowhere for inmates to run 50 yards or more in our facility.

41	Total number of "yes" responses
79%	Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #3: Run to the scene of a disturbance or emergency.

CO County/ Facility

Contra Costa - Main Detention

ID	Sx	Ps	Response	Comments
1	F	I	1	
2	F	S	1	
3	M	I	2	2 flights of stairs.
4	M	S	1	

El Dorado - County Jail/ Placerville

ID	Sx	Ps	Response	Comments
5	F	I	2	No standard.
6	M	I	1	
7	M	S	1	
8	F	I	1	

Fresno - County Detention

ID	Sx	Ps	Response	Comments
9	F	S	1	
10	F	I	1	4 flights of stairs a.s.a.p., hopefully w/in no more than 3 mins.
11	M	S	1	
12	M	I	1	

Lassen - County Jail

ID	Sx	Ps	Response	Comments
13	F	I	1	
14	F	S	1	
15	M	I	1	

Los Angeles - Central Jail

ID	Sx	Ps	Response	Comments
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	

Monterey - County Jail

ID	Sx	Ps	Response	Comments
20	F	I	1	
21	M	S	1	
22	M	I	1	

San Francisco - County Jails

ID	Sx	Ps	Response	Comments
23	M	S	1	
24	M	I	2	
25	F	I	1	
26	M	I	*1	Ok with deletion of reference to stairs; no stairs here.

San Mateo - Women's Corr. Center

ID	Sx	Ps	Response	Comments
27	F	I	1	For 11 hours of a 12 hours shift.

San Mateo - Main Jail

ID	Sx	Ps	Response	Comments
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail
30 F I 1
31 M I 1
32 M S 1

Sonoma - County Jail
33 F I 1 Should be able to but facility has no time limit.
34 M I 1
35 M S 1
36 M S 1

Stanislaus - County Women's Facility
37 F S 1
38 F I 1
39 M I 1
40 M S 2 [No revision]

Ventura - County Main Jail
41 M I 1
42 M I 1

Yolo - County Sheriff's Department
43 M I 1
44 F I 2 No stairs within secure confines; delete ref to stairs and time limit.
45 M S 1

Santa Cruz - Main Jail
46 F S 1
47 M S 1
48 M I 1

Santa Barbara - County Jail
49 M S 2 9 of 10 hours; we are required to keep ourselves physically fit.
50 M I 1
51 M I 1
52 F I 1

46 Total number of "yes" responses
88% Total percentage of "yes" responses

52 respondents
17 facilities

1- yes; 2- no; 0- no response; *- response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #4: Physically subdue or restrain an inmate by yourself.

CO County/ Facility

Contra Costa - Main Detention

CO ID	Sx	Ps	Response	Comments
1	F	I	1	
2	F	S	1	
3	M	I	2	45 seconds.
4	M	S	1	

El Dorado - County Jail/ Placerville

CO ID	Sx	Ps	Response	Comments
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	

Fresno - County Detention

CO ID	Sx	Ps	Response	Comments
9	F	S	1	
10	F	I	1	3 minutes, until help comes.
11	M	S	1	
12	M	I	1	

Lassen - County Jail

CO ID	Sx	Ps	Response	Comments
13	F	I	1	
14	F	S	1	
15	M	I	1	

Los Angeles - Central Jail

CO ID	Sx	Ps	Response	Comments
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	

Monterey - County Jail

CO ID	Sx	Ps	Response	Comments
20	F	I	1	
21	M	S	1	
22	M	I	1	

San Francisco - County Jails

CO ID	Sx	Ps	Response	Comments
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	

San Mateo - Women's Corr. Center

CO ID	Sx	Ps	Response	Comments
27	F	I	2	Should not restrain resisting individual without help.

San Mateo - Main Jail

CO ID	Sx	Ps	Response	Comments
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	2	Should wait for sufficient backup.
34	M	I	2	No standard exists.
35	M	S	1	
36	M	S	1	

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	1	
40	M	S	1	

Ventura - County Main Jail

41	M	I	1	
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	2	[No revision]

Santa Barbara - County Jail

49	M	S	1	9 of 10 hours; delete 30 secs; we are trained in control techniques.
50	M	I	1	
51	M	I	1	
52	F	I	1	

47	Total number of "yes" responses
90%	Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #5: Physically subdue or restrain inmate with the help of another person.

CO County/ Facility

ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	
34	M	I	2	No standard exists.
35	M	S	1	
36	M	S	1	

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	1	
40	M	S	1	

Ventura - County Main Jail

41	M	I	1	
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	1	9 of 10 hours; delete 1 min.; we are trained in control techniques.
50	M	I	1	
51	M	I	1	
52	F	I	1	

51	Total number of "yes" responses
98%	Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #6: Physically separate two fighting inmates with the help of another officer.

CO ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail
30 F I 1
31 M I 1
32 M S 1

Sonoma - County Jail
33 F I 1
34 M I 2 No standard exists.
35 M S 1
36 M S 1

Stanislaus - County Women's Facility
37 F S 1
38 F I 1
39 M I 1
40 M S 1

Ventura - County Main Jail
41 M I 1 But practice is to wait for superiority of manpower.
42 M I 1

Yolo - County Sheriff's Department
43 M I 1
44 F I 1
45 M S 1

Santa Cruz - Main Jail
46 F S 1
47 M S 1
48 M I 1

Santa Barbara - County Jail
49 M S 1 9 of 10 hours; delete 1 min.; we are trained in control techniques.
50 M I 1
51 M I 1
52 F I 1

51 Total number of "yes" responses
98% Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #7: Physically separate two fighting inmates by yourself.

CO	County/ Facility			
ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	*2	Secure all other inmates and call for assistance.
2	F	S	0	[No revision]
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	*2	Unless a life is threatened.
7	M	S	0	[No revision]
8	F	I	1	Wait for another officer.
Fresno - County Detention				
9	F	S	1	
10	F	I	0	
11	M	S	1	
12	M	I	2	Case by case basis.
Lassen - County Jail				
13	F	I	1	
14	F	S	1	Same as 5 [with assistance].
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	*2	Back up required prior to taking this type of action.
18	M	S	1	
19	M	I	1	Officer has back up within 5 seconds.
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	2	May be ok if isolated area; need 2+ COs in multiple housing areas.
San Mateo - Women's Corr. Center				
27	F	I	*0	Definitely against regulations.
San Mateo - Main Jail				
28	M	S	*2	Try to defuse verbally; never physically separate yourself.
29	M	I	*2	Against s.o.p.

Siskiyou - County Jail

30	F	I	*2	Would call back-up.
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	*2	Should wait for sufficient back-up.
34	M	I	*2	No standard exists.
35	M	S	1	
36	M	S	1	Not to be done alone; requires 2 officers minimum.

Stanislaus - County Women's Facility

37	F	S	*2	Requires at least two staff.
38	F	I	*2	Requires two jailers.
39	M	I	*2	Get help; when help arrives, separate (same as #5).
40	M	S	1	

Ventura - County Main Jail

41	M	I	1	
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	*2	Against regulations.
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	*2	Two fighting inmates are physically separated by 2+ officers.
47	M	S	1	
48	M	I	1	With backup only.

Santa Barbara - County Jail

49	M	S	*2	Common sense should prevail in each situation.
50	M	I	1	Wait for assisting officer.
51	M	I	1	Always call for help.
52	F	I	*2	Always call for backups; never separate fighting inmates alone.

31	Total number of "yes" responses
60%	Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #8: Defend yourself against an inmate armed with a weapon, disarm and subdue inmate.

CO County/ Facility

ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	No mace carried.
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail

30	F	I	2	Call for backup.
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	Except no mace in facility.
34	M	I	2	No standard exists.
35	M	S	1	
36	M	S	2	officers not armed with mace; otherwise standard ok.

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	2	Use another tool other than mace.
40	M	S	1	

Ventura - County Main Jail

41	M	I	2	Accurate except no defense tool (e.g., mace) in the facility.
42	M	I	1	No mace allowed in facility.

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	1	9 of 10 hours.
50	M	I	1	
51	M	I	1	
52	F	I	1	

47 Total number of "yes" responses
90% Total percentage of "yes" responses

52 respondents
17 facilities

1- yes; 2- no; 0- no response; *- response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #9: Search areas that are not easily accessible for contraband.

CO ID	County/ Sx	Facility Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	[From std. 15: for checking bunk beds during cell checks.]
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	Have FT search team, but all staff still must do as needed.
10	F	I	1	Also add agile enough to climb up onto bunks and bars of cells.
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	*1	No chairs, but climb ladders, bars and on fixed bunks.
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail

30	F	I	1
31	M	I	1
32	M	S	1

Sonoma - County Jail

33	F	I	1
34	M	I	1
35	M	S	1
36	M	S	1

Stanislaus - County Women's Facility

37	F	S	1
38	F	I	1
39	M	I	1
40	M	S	1

Ventura - County Main Jail

41	M	I	1
42	M	I	1

Yolo - County Sheriff's Department

43	M	I	1
44	F	I	1
45	M	S	1

Santa Cruz - Main Jail

46	F	S	1
47	M	S	1
48	M	I	1

Santa Barbara - County Jail

49	M	S	1	9 of 10 hours.
50	M	I	1	
51	M	I	1	
52	F	I	1	

52 Total number of "yes" responses
100% Total percentage of "yes" responses

52 respondents
17 facilities

1- yes; 2- no; 0- no response; *- response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #10: Carry heavy objects with the help of another officer.

CO	County/	Facility		
ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	
34	M	I	2	No standard exists.
35	M	S	1	
36	M	S	1	

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	1	
40	M	S	2	[No revision]

Ventura - County Main Jail

41	M	I	1	Yes, but we use M.S.A.
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	1	9 of 10 hours.
50	M	I	1	
51	M	I	1	
52	F	I	1	

50 Total number of "yes" responses
96% Total percentage of "yes" responses

52 respondents
17 facilities

1- yes; 2- no; 0- no response; *- response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #11: Lift and carry heavy objects with the help of another officer.

CO County/ Facility

Contra Costa - Main Detention

ID	Sx	Ps	Response	Comments
1	F	I	1	
2	F	S	1	
3	M	I	2	Inmates are moved either by gurney or wheelchair.
4	M	S	2	lift a 165 lb inmate onto an ambulance gurney.

El Dorado - County Jail/ Placerville

ID	Sx	Ps	Response	Comments
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	

Fresno - County Detention

ID	Sx	Ps	Response	Comments
9	F	S	1	With assistance.
10	F	I	1	With assistance.
11	M	S	1	
12	M	I	1	

Lassen - County Jail

ID	Sx	Ps	Response	Comments
13	F	I	1	
14	F	S	1	
15	M	I	1	

Los Angeles - Central Jail

ID	Sx	Ps	Response	Comments
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	

Monterey - County Jail

ID	Sx	Ps	Response	Comments
20	F	I	1	
21	M	S	1	
22	M	I	1	

San Francisco - County Jails

ID	Sx	Ps	Response	Comments
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	*1	No stairs so lay and drag inmate on blanket (vs. carry stretcher).

San Mateo - Women's Corr. Center

ID	Sx	Ps	Response	Comments
27	F	I	1	For 11 hours of a 12 hour shift.

San Mateo - Main Jail

ID	Sx	Ps	Response	Comments
28	M	S	1	
29	M	I	1	

Siskiyou - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	Suggest on-going mandatory training for necessary strength and endurance.
34	M	I	2	No standard exists.
35	M	S	1	
36	M	S	1	

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	1	
40	M	S	2	[No revision]

Ventura - County Main Jail

41	M	I	1	
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	2	9 of 10 hours; we are required to keep ourselves fit.
50	M	I	1	
51	M	I	1	
52	F	I	1	

47 Total number of "yes" responses
90% Total percentage of "yes" responses

52 respondents
17 facilities

1- yes; 2- no; 0- no response; *- response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #12: Drag heavy objects.

CO County/ Facility

ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	1	
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	2	140 lb.
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	
San Mateo - Women's Corr. Center				
27	F	I	1	For 11 hours of a 12 hour shift.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	1	

__Siskiyou__ - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

__Sonoma__ - County Jail

33	F	I	1	Suggest on-going mandatory training for necessary strength and endurance.
34	M	I	2	No standard exists.
35	M	S	1	
36	M	S	1	

__Stanislaus__ - County Women's Facility

37	F	S	1	
38	F	I	1	
39	M	I	1	
40	M	S	2	[No revision]

__Ventura__ - County Main Jail

41	M	I	1	
42	M	I	1	

__Yolo__ - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

__Santa Cruz__ - Main Jail

46	F	S	1	
47	M	S	1	
48	M	I	1	

__Santa Barbara__ - County Jail

49	M	S	2	9 of 10 hours; we are required to keep ourselves fit.
50	M	I	1	
51	M	I	1	
52	F	I	1	

48 Total number of "yes" responses
92% Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #13: Operate difficult-to-operate gates, doors, or locks manually.

CO ID	County/ Sx	Ps	Facility Response	Comments
Contra Costa - Main Detention				
1	F	I	*2	Door locks operated electrically from central control.
2	F	S	*2	Do not have to do this; central control opens controlled doors.
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	*1	All cell doors have manual keys to operate.
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	No problem with locks, gates or doors.
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	2	Officer must control; should not be pushed or swung open by inmates.
25	F	I	1	
26	M	I	1	Doors/gates open easily; locks are worn- require mod. hand strength.
San Mateo - Women's Corr. Center				
27	F	I	0	Door knobs turn opposite way and doors heavier that normal doors.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	*2	Call maintenance.

Siskiyou - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	Suggest more brush-up training on how to manually operate gates/doors.
34	M	I	1	
35	M	S	1	
36	M	S	1	

Stanislaus - County Women's Facility

37	F	S	*2	No heavy or difficult to open doors or gates.
38	F	I	*2	Facility does not have such doors.
39	M	I	*2	Get maintenance to repair.
40	M	S	1	

Ventura - County Main Jail

41	M	I	1	Most are electronic; manual vary only by a specific key code.
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	2	Able to stand on chair, put allen wrench over head and lean down with key to override electronic doors.
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	2	Operate racking mechanism to unlock barred cells.
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	*2	No standard.
50	M	I	1	
51	M	I	1	
52	F	I	1	

41 Total number of "yes" responses
79% Total percentage of "yes" responses

52 respondents
17 facilities

1- yes; 2- no; 0- no response; *- response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #14: Push hard to move objects by hand.

CO	County/ Facility			
ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	*2	Use inmates.
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	1	
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	1	
25	F	I	1	
26	M	I	1	None.
San Mateo - Women's Corr. Center				
27	F	I	*0	Hard to move objects are moved by inmates.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	*2	Call maintenance.

Siskiyou - County Jail

30	F	I	1	
31	M	I	1	
32	M	S	1	

Sonoma - County Jail

33	F	I	1	
34	M	I	1	
35	M	S	1	
36	M	S	1	

Stanislaus - County Women's Facility

37	F	S	1	
38	F	I	*2	Get necessary assistance.
39	M	I	*2	Have trusties move it.
40	M	S	2	[No revision]

Ventura - County Main Jail

41	M	I	1	Common sense dictates your actions.
42	M	I	1	

Yolo - County Sheriff's Department

43	M	I	1	
44	F	I	1	
45	M	S	1	

Santa Cruz - Main Jail

46	F	S	*2	No standard; employ inmate worker assistance.
47	M	S	1	
48	M	I	1	

Santa Barbara - County Jail

49	M	S	*2	No standard.
50	M	I	1	
51	M	I	1	
52	F	I	1	

44 Total number of "yes" responses
85% Total percentage of "yes" responses

52 respondents
17 facilities

1- yes; 2- no; 0- no response; *- response is contradicted by comment.

CO Verification Survey Responses (6/4/85)

STANDARD #15: Pull yourself up over obstacles.

CO	County/ Facility			
ID	Sx	Ps	Response	Comments
Contra Costa - Main Detention				
1	F	I	0	[No revision]
2	F	S	1	
3	M	I	1	
4	M	S	1	
El Dorado - County Jail/ Placerville				
5	F	I	1	
6	M	I	*1	For checking bunk beds during cell checks.
7	M	S	1	
8	F	I	1	
Fresno - County Detention				
9	F	S	1	
10	F	I	1	
11	M	S	1	
12	M	I	1	
Lassen - County Jail				
13	F	I	1	
14	F	S	1	
15	M	I	1	
Los Angeles - Central Jail				
16	F	I	1	
17	M	S	1	
18	M	S	1	
19	M	I	1	
Monterey - County Jail				
20	F	I	1	
21	M	S	1	
22	M	I	1	
San Francisco - County Jails				
23	M	S	1	
24	M	I	2	This may be necessary in an emergency.
25	F	I	1	
26	M	I	1.	None.
San Mateo - Women's Corr. Center				
27	F	I	*0	This would not be necessary in our facility.
San Mateo - Main Jail				
28	M	S	1	
29	M	I	2	

Siskiyou - County Jail
30 F I 1
31 M I 1
32 M S 1

Sonoma - County Jail
33 F I *2 No standard; physical fitness program would help.
34 M I 1
35 M S 1
36 M S 1

Stanislaus - County Women's Facility
37 F S 1
38 F I 1
39 M I *2 Find alternatives; do what is necessary to get over obstacles.
40 M S 2 [No revision]

Ventura - County Main Jail
41 M I 1
42 M I 1

Yolo - County Sheriff's Department
43 M I 1
44 F I 1
45 M S 1

Santa Cruz - Main Jail
46 F S *2 Against policy to climb over perimeter fences.
47 M S 1
48 M I 1

Santa Barbara - County Jail
49 M S *2 No standard.
50 M I 1
51 M I 1
52 F I 1

40 Total number of "yes" responses
83% Total percentage of "yes" responses

52 respondents
17 facilities

1= yes; 2= no; 0= no response; *= response is contradicted by comment.

APPENDIX D
VITAE FOR
EXPERT PANEL OF EXERCISE PHYSIOLOGISTS

- Dr. Glenn P. Town
- Dr. John (Jack) M. Kelly
- Dr. William D. Gilman

VITA OF

GLENN P. TOWN, Ph.D.

PHONE: (312) 682-4238

ADDRESS: 817 Webster, Wheaton, Illinois 60187

PLACE OF BIRTH: Yakima, Washington

AGE: 35

MARITAL STATUS: Married

CHILDREN: 2

EDUCATION

Guilford High School (Rockford, IL)	Graduated 1967
Eastern Kentucky University (Richmond, KY)	Attended 1967-69
Oral Roberts University (Tulsa, OK)	B.S., P.E. 1975
Kent State University (Kent, OH)	M.A., P.E. 1976
Kent State University (Kent, OH)	Ph.D. Exercise Physiology 1981

WORK EXPERIENCE

Exercise Physiology Lab Technician, Oral Roberts University, 1974-75.

Track/Cross Country Assistant Coach, Kent State University, 1975-76.

Physical Education Instructor, Kent State University, 1976-79. (Graduate Assistant)

Lab Assistant, Applied Physiology Laboratory, Kent State University, 1977-78.

Teaching Fellowship, Kent State University, 1978-79.

Director, City of St. Paul Firehouse Fitness Program, January 15, 1980 - August 15, 1981.

Consultant and Expert Witness: EEOC vs. City of Saint Paul "Age 65 as a Bona Fide Occupational Qualification for Firefighters", June 1980.

Exercise Physiologist for Wheaton College, August 3, 1981 - present.

ATHLETIC EXPERIENCE

Illinois State High School 2 mile runner-up (1967)

Eastern Kentucky University Cross Country, varsity letter as a freshman, thirteenth place in conference championship (1967)

Current road race participation:

Race	Place	Time	Year
American National Insurance Company Marathon (Galveston, TX)	21	3:02.15	1972
White Rock Marathon (Dallas, TX)	21	2:46	1974
U.S.T.F.F. Marathon (KS)	6	2:38.15	1975
University of Kansas Relays	9	2:38.50	1975
Canton Marathon (OH)	4	2:43.57	1975
Revco-Western Reserve Marathon (OH)	14	2:43.57	1977
Charlotte Observer Marathon (NC)	40	2:39.05	1978
Maryland Marathon (MD)	57	2:39.22	1979
City of Lakes Marathon (MN)	38	2:40.15	1980
Menomonie Tinman Triathlon (WI) (1 mi. swim, 55 mi. bike, 12.4 mi. run)	1	4:22.15	1982
Ironman Triathlon World Championships (HI) (2.4 mi. swim, 112 mi. bike, 26.2 mi. run)	24	10:34.03	1983

ADULT FITNESS EXPERIENCE

I was active in adult fitness testing 1975-76 under the direction of Dr. L.A. Golding at Kent State University. During this time, I also assisted in exercise leadership, but on a lesser scale. In 1976, I designed and developed a treadmill test to predict maximum fitness for adults, ages 30-50 (see Publications). I was active in adult fitness testing under the direction of Dr. W.E. Sinning at Kent State University. I directed a physical fitness program for 465 members of the St. Paul Fire Department which included stress testing and an individualized exercise prescription for each member. Presently I direct an adult fitness program for Wheaton College employees and residents of the Wheaton area.

PUBLICATIONS

Journals

Town, G.P. and L.A. Golding. "A Simple Submaximal Treadmill Test for Predicting Maximum Oxygen Consumption." *Journal of Physical Education* September/October 1977.

Sol, Neil, Glenn P. Town and Wayne E. Sinning. "Energy Expenditure While Rope Skipping." *Medicine and Science in Sports* 12(2): 1980 (Abstract).

Town, Glenn P., Neil Sol and Wayne E. Sinning. "The Effect of Rope Skipping Rate on Energy Expenditure of Males and Females." *Medicine and Science in Sports* 12(4), 195-298, 1980.

Woodard, Jay and Glenn P. Town. "The Progressive Metabolic and Energy Demands of Triathlon Competitors." *Medicine and Science in Sports* 15(2): 1983 (Abstract).

Town, Glenn P. "Physical Fitness and the Christian." *Inform*, January, 1983.

Sol, N., G. Town, and J. Woodard. Selected Physiological Response to Varied Handgrip and Crank Styles in Maximal Arm Ergometry. *Medicine and Science in Sports* 16(2): 1984 (Abstract).

Books

Town, Glenn P. *The Science of Triathlon Training and Competition* Human Kinetics Publishers, Champaign, IL 1984 (contracted to write in summer, 1984)

Town, Glenn P. and Russell, E. *Foundations of Physical Fitness/Wellness* (2nd edition) Wheaton College, 1984, 112 pp.

PROFESSIONAL MEETINGS ATTENDED

April 1983	American Alliance of Physical Education, Recreation and Dance. National Meeting, Minneapolis, Minnesota.
January 1983	National Associate of Physical Education in Higher Education. National Meeting, Indianapolis, Indiana.
May 1982	Speaker, American College of Sports Medicine. National Meeting, Minneapolis, Minnesota.
December 1981	American College of Sports Medicine Midwest Regional Meeting. University of Wisconsin, Milwaukee.

February 1980	American College of Sports Medicine Northlands Regional Meeting. Cable, Wisconsin.
November 1979	American College of Sports Medicine Midwest Regional Meeting. Kent, Ohio.
May 1978	American College of Sports Medicine National Meeting. Washington, D.C.
May 1977	American College of Sports Medicine National Meeting. Chicago, Illinois.
December 1976	Speaker, Ohio Association of Health, Physical Education and Recreation, Cincinnati, Ohio. "A Treadmill Test for Predicting Maximum Oxygen Consumption."
November 1976	Midwest Regional Meeting of the American College of Sports Medicine, The Ohio State University, Columbus, Ohio.

AWARDS/HONORS

Track and Cross Country Scholarship - Eastern Kentucky University, 1967-68.

Bronze Star Medal - United States Army, Vietnam, April 1972.

Teaching Fellowship, Kent State University, 1978-79.

First recipient for the Annual Alumni Award for alumni Physical Education Majors - Oral Roberts University - 1983.

Outstanding Young Men of America recipient - 1984.

PROFESSIONAL RESPONSIBILITIES AT WHEATON COLLEGE

1. Direct Exercise Physiology Laboratory
2. Administer stress tests and the preparation of prescriptive exercise programs.
3. Developed and direct the Wheaton College Wellness program.
4. Coordinate the foundations 121 classes for all students.
5. Teach Exercise Physiology, Kinesiology, Cardiovascular Dynamics, Nutrition and Foundations classes in the P.E. department.
6. Developed and coordinate the Exercise Specialist Track for Physical Education majors.

REFERENCES

Dr. Wayne E. Sinning
Applied Physiology Laboratory
Kent State University
Kent, Ohio 44242

Rev. Robert A. Stamps
Chaplain, Oral Roberts University
Tulsa, Oklahoma 74102

Dr. James A. Schwane
Health & Physical Education Department
University of Texas
3900 University Blvd.
Tyler, Texas 75701

John M. Kelly, D.P.E.
Curriculum Vita
(last updated 1982)

John M. Kelly, B.S., M.S., D.P.E.
(Doctorate, Physical Education and Physiology)
908 Riverside Drive S.E.
St. Cloud, MN 56301 Telephone (612) 252-9705

Human Performance Laboratory
Department of Health, Physical
Education and Recreation
St. Cloud State University
St. Cloud, MN 56301 Telephone (612) 255-3105

Date of Birth: July 24, 1935
Birthplace: Jeannette, Pennsylvania
Citizenship: United States
Health: Excellent
Marital Status: Married
Children: Three

Education:

1966-1969	Doctoral Studies, Springfield College, Springfield, Massachusetts, D.P.E. Physical Education, Exercise Physiology 1969.
1957-1959	M.S. Degree, University of Oregon, Eugene, Oregon. Physical Education, Anatomy and Exercise Physiology.
1953-1957	M.S. Degree, Slippery Rock State College, Slippery Rock, Pennsylvania. Health and Physical Education.

Professional Certification:

1976 -	Program Director, American College of Sports Medicine, Adult Fitness and Rehabilitation

Professional Duties:

1969-1982 -
Professor : St. Cloud State University
Director : Human Performance Laboratory
Director : HPER Graduate Studies
Teacher : Human and Exercise Physiology
Director : Adult Fitness Program

1962-1966 -
Teacher (HPER) Coach, Abington on Heights High School, Clarks Summit, Pennsylvania.

Honors and Offices:

1966-1969	NDEA Fellowship
1978	Minnesota Council on Health Achievement Award
1976-1978	Treasurer/Secretary, Northland Chapter American College of Sports Medicine
1980	President, Northland Chapter, American College of Sports Medicine
1980	Fellow, American College of Sports Medicine.
1984	Minnesota Health Citizen of the Year (Minnesota Council on Health)

Military Service:

August 1959-1962 -- 1st Lieutenant, USMCR

Publications:

Kelly, John M., Robert C. Serfass and G. Alan Stull. "Elicitation of Maximal Oxygen Uptake From Standing Bicycle Ergometry." *Research Quarterly for Exercise and Sport*, 51:315-322, 1980.

Kelly, John M., B.A. Gorney and K. K. Kalm. "The Effects of a Collegiate Wrestling Season on Body Composition, Cardiovascular Fitness and Muscular Strength and Endurance." *Medicine and Science in Sports*, 10:119-124, 1978.

Kelly, John M. and John D. Wickkiser. "For Ideal Football Weight Assess Fat, Not Poundage." *The Physician and Sports Medicine*. 3:38-42, 1975.

Wickkiser, John D. and John M. Kelly. "The Body Composition of a College Football Team." *Medicine and Science in Sports*. 7:199-202, 1975.

Millerhagen, J.O. and John M. Kelly. "A Study of Combined Arm and Leg Exercise with Application to Nordic Skiing." *Canadian Journal of Applied Sports Sciences*. To be published: Summer 1983.

William D. Gilman, Ph.D.
VITA - partially updated 1984

Personal Data:

William D. Gilman
184 Amherst
St. Paul, MN 55105

Phone:
Home: (612) 678-2580
Business: (612) 228-6262

Birthdate: April 25, 1947
Married, wife Karyl Thurston
Health: Excellent
Hometown: Glenwood, Minn.

Education:

Kent State University Kent, Ohio 44242	Ph.D. Physiology of Exercise	9/77 - 5/84
St. Cloud State University St. Cloud, Minn. 56301	M.S. Physical Education	6/76 - 8/77
Macalester College St. Paul, Minn. 55104	Teaching Certificate	7/73 - 12/73
Macalester College St. Paul, Minn. 55104	B.A. Biology	9/65 - 5/69
Glenwood Public High School Glenwood, Minn. 56334	High School Diploma	9/61 - 6/65

Related Professional Experiences:

Physical Fitness Coordinator, Department of Fire and Safety Services, St. Paul, Minn., 1981 - present

Laboratory Assistant for Applied Physiology Research Lab, Kent State University, 19.9-1981.

Graduate Assistant at Kent State University, 1977-1979.

Basic Physical Activity course taught at Kent State University included: Basketball, Tennis, Jogging, Volleyball, Weight Training, Racquetball, Bowling, Badminton, Survey of Sports, Cross-Country Skiing.

Fitness Consultant to the Executive Fitness Program at the B.F. Goodrich Co., 1979-1981. (Part-time basis)

Instructor at YWCA Physical Fitness Specialists Workshop at Kent State University, 1978, 1980.

Work-study Assistantship. Assigned to Dr. Jack Kelly, Exercise Physiologist, P.E. Department, St. Cloud State University, 1976-1977.

William D. Gilman, Ph.D.

Professional Experiences (Continued)

Instructor of ninth grade science, Glenwood Public High School, Glenwood, Minn., 1974-1975.

Semi-professional basketball player for Dynamo Club Brugge, Brugge, Belgium, 1970-1973.

Coordinator of Recreation, Macalester College, 1969-1970.

Student Assistant to Dr. Dale Hansen, Chairman of the Physical Education Department, Macalester College, 1968-1969.

Professional Affiliations:

Member of the American College of Sports Medicine Science since 1978.

Member of the American Alliance of Health, Physical Education, Recreation and Dance since 1980.

Publications and Research Interest:

Thesis: The Body Composition of High School Wrestlers.

"The Body Composition of High School Wrestlers" presentation to the Northland Chapter of the American College of Sports Medicine, March, 1977.

Dissertation topic: The Relationship Between Serum Free Fatty Acid Concentration and the Lactate Threshold at Three Ambient Temperatures.

Research Interests: Nutrition; weight control; and cold weather work.

"Nutrition and Wrestling" presentation to the Ravenna Wrestlers Booster Club, November, 1979.

"Exercise and Weight Control" presentation to the Akron Home Economics Association, November, 1978.

Activities and Awards:

Representative to the Graduate Student Senate, Kent State University 1980-1981.

Certified in CPR, American Heart Association, 1979-1984.

Most Valuable Player for Dynamo Club Brugge Basketball Team, 1972.

Co-Captain and three-year letterman for the Macalester College Basketball Team, 1966-1969.

Co-Captain for the football and basketball high school varsity teams and also lettered in cross-country, track, and baseball.

Previous Employment:

Physical Fitness Coordinator
Dept. of Fire and Safety Services
101 East Tenth Street
St. Paul, Minn. 55101
9/81-Current

Laboratory Assistant
Applied Physiology Research Laboratory
Kent State University
Kent, Ohio 44242
7/79-8/81

Work-Study Assistantship
St. Cloud State Physical Education Department
St. Cloud, Minn. 56301
6/76-8/77

Teacher, 9th Grade Science
Glenwood Public Schools
Glenwood, Minn. 56334
9/74-6/75

Basketball Player
Dynamo Club Brugge
Brugge, Belgium 8320
9/70-5/73

Fitness Consultant
Executive Fitness Program
B.F. Goodrich Co.
500 S. Main
Akron, Ohio 44318
9/79-8/81 (Part time)

Graduate Assistantship, HPER
Kent State University
Kent, Ohio 44242
9/77-7/79

Carpenter's Assistant
Shea-McCrory Builders
Glenwood, Minn. 56334
1/76-7/76 and Summers

Long Term Substitute
St. Paul Public Schools
St. Paul, Minn. 55102
1/74-6/74

Coordinator of Recreation
Macalester College
St. Paul, Minn. 55104
1/74-6/74

APPENDIX E

SAMPLE MEDICAL SCREENING FORM
AND PHYSICIANS GUIDE
FOR USE IN SELECTION OF CORRECTIONS OFFICERS

Appendix E

SAMPLE MEDICAL SCREENING FORM
FOR USE IN THE SELECTION OF CORRECTIONS OFFICERS

Employing Agency: ____

Name, Address, and Telephone Number of Contact Person in the Employing Agency:

____

____

____

____

Candidate's Name: ____

Candidate's signature authorizing release of Medical records and findings to the employing agency:

Signature: ______________________________ **Date:** ______________

Physician's Name: ______________________

Address: ______________________

____

Telephone: ______________________

PHYSICIAN'S STATEMENT (to be completed following the examination):

I hereby certify that I have examined the above candidate's fitness for the corrections officer position. The information in this form accurately represents my evaluation of any contraindications to this candidate's fitness for the position of corrections officer. I have recorded the diagnostic procedures which I used in making this assessment at the end of this form. I understand that the presence of contraindications does not automatically disqualify this candidate, nor does their absence constitute a guarantee that the candidate can meet the physical requirements of the corrections officer position.

Physician's Signature: ______________________ Date: ______________

PHYSICIAN GUIDELINES

This form is designed to assist you in assessing the physical fitness of prospective corrections officers as it relates to their potential for successful job performance. It provides:

I. A checklist for fitness to perform physically-demanding job tasks

II. A checklist for fitness to participate in the pre-placement physical conditioning program

The purpose of this medical screen is to allow for case-by-case identification of candidates who have pre-existing physical/medical conditions which may contraindicate their participation in particular aspects of the training program or the job itself. This, in turn, enables the employing agency to make reasonable accommodation to the needs of such candidates (or exclude the candidate when reasonable accommodation is infeasible) and, hence, to keep all risk of physical harm and associated liability to a minimum.

No specific diagnostic procedures are prescribed for this medical screening examination. Rather, as the examining physician, it is your responsibility to identify and use professionally appropriate diagnostic procedures to evaluate the candidate's fitness to engage in each of the listed activities. You are then asked to record, for each activity, whether or not any probable contraindicating conditions were revealed by the examination. You also are asked to attach a list of all diagnostic tests which you performed as part of the examination.

Note that diagnosis of conditions contraindicating participation in particular activities will NOT, in itself, disqualify the candidate. The employing agency must, if feasible, make reasonable accommodation to enable the candidate's participation.

Based on analysis by an expert panel of exercise physiologists, and the physical fitness research literature, the following capacities have been identified as related to corrections officer job performance:

CARDIOVASCULAR ENDURANCE/STAMINA:

- ability to perform prolonged bouts of aerobic work without experiencing fatigue or exhaustion
- distinguished by: total body involvement (vs. localized function), cardiovascular (vs. skeletal) functioning, and relatively long-term work (more than three minutes at a stretch).

MUSCULAR STRENGTH:

- ability to exert maximum muscular force for a brief period of time
- includes arm, back, abdominal, shoulder, and leg strength
- does not include resistance to fatigue

POWER/EXPLOSIVE ENERGY:

- ability to expend a maximum of energy in one or a series of thrusts
- important where short bursts of physical effort are required either to propel one's own body weight or external objects

MUSCLE ENDURANCE:

- ability to exert muscular force repeatedly or continuously over time
- emphasis on resistance of the muscles to fatigue
- involved in propelling, supporting, or moving the body repeatedly, or supporting it for prolonged periods

FLEXIBILITY:

- ability to extend trunk, arms, or legs through a range of motion
- involved in tasks that require suppleness, such as reaching and stretching

AGILITY/COORDINATION/BALANCE:

- ability to coordinate the simultaneous actions of different parts or limbs of the body when the body is in motion, and to maintain balance when external forces act against stability.
- involved in most motions, but to a greater degree in complex and/or rapid movement sequences

Table 1 shows how these capacities have been related to each of the physically demanding activities for which you are asked to evaluate the candidate's fitness. This cross referencing of the capacities to the activities may be helpful for identifying appropriate diagnostic procedures. For additional guidelines, see:

> Nylander, S.W. and Carmean, G., Medical Standards Project Final Report. 3rd revised edition, October 1984.

When you have completed the examination, please mail the form (in the attached self-addressed envelope) directly to the contact person in the employing agency. If you have any questions concerning an examination, please telephone the contact person at the number given above.

MEDICAL APPENDIX
TABLE I

CORRESPONDENCE MATRIX FOR CO FITNESS CAPACITIES, TASKS, AND EXERCISES

	Cardiovascular Endurance	Muscular Strength	Muscular Endurance	Power/Explosive Strength	Flexibility	Agility/ Coordination Balance
Tasks/Standards						
Walk/stand	XXX		XXX			
Pursue		XXX		XXX		
Run (walk/jog) to emergency				XXX		XXX
Restrain alone		XXX		(X)	(X)	
Restrain with assistance		XXX		(X)	(X)	
Separate with assistance		XXX		(X)	(X)	
Defend self				(X)	(X)	XXX
Search	(X)		(X)		XXX	XXX
Carry alone		XXX				XXX
Lift and carry with assistance		XXX	XXX			XXX
Drag		XXX		XXX		
Exercises						
Arm circle					XXX	
Side Bends					XXX	
Windmills					XXX	XXX
Trunk Twists					XXX	
Calf stretches					XXX	
Quad stretches					XXX	
Knee hugs					XXX	
Stride stretches					XXX	XXX
Stomach flutter kicks			XXX		XXX	
Knee to forehead			XXX		XXX	
Push-ups		XXX	XXX			
Sit-ups		XXX	XXX			
Side leg raises			XXX			
Vertical jumps				XXX		
Leg presses or mod.wall sits		XXX	XXX			
Wrist curls		XXX				
Arm curls		XXX				
Jump & duck						XXX
*Stretcher carries		XXX	XXX			XXX
*Dummy drags		XXX		XXX		
*Airpack carries		XXX		XXX		XXX
*Stair walks	XXX			XXX		XXX
*50-yard sprints		XXX		XXX		
Long-distance walk/jog	XXX		XXX			

*indicates exercises which include a benchmark minimum
XXX consistent linkage
(X) linkage depends on how activity is performed

CHECKLIST FOR FITNESS TO PERFORM PHYSICALLY-DEMANDING JOB TASKS

This checklist describes physically demanding tasks which are typically required of Corrections Officers. Please review all of the tasks and then conduct an appropriate examination to detect the presence of any factors which may contraindicate or inhibit the candidate's performance of any of these tasks. Then, for each task, indicate on this form whether or not any contraindicating factors were revealed by the examination. Also, on the last page of this form, record or attach a complete list of the diagnostic procedures which you have performed as a part of the examination.

A. Task: Walk or stand for long periods of time.

Average Frequency: Every shift.

Typical Minimum Standard: Be able to walk or stand for 7 hours of an 8 hour shift.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

B. Task: Pursue inmates on foot (running).

Average Frequency: Less than once or twice a year.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to pursue a running inmate by sprinting a distance of 30 to 50 yards.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

C. Task: Run to the scene of a disturbance or emergency.

Average Frequency: One to three times per month.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to walk briskly or jog a distance of 150 feet to the scene of an emergency, including climbing one short flight of stairs (e.g., 20 steps), within a total time of approximately 30 seconds.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

D. Task: Physically subdue or restrain an inmate by yourself.

Average Frequency: About twice a year.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to apply appropriate techniques to physically restrain a resisting individual, by yourself, for at least 30 seconds.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

E. Task: Physically subdue or restrain an inmate with the help of another person.

Average Frequency: About once a month.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to apply appropriate techniques to help another officer to:

A. Move a resisting individual a distance of 20 feet or more (e.g., away from the scene of a disturbance), and
B. Physically restrain a resisting individual for least one minute.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

F. Task: Physically separate two fighting inmates with the help of another officer.

Average Frequency: Three to eleven times a year.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, and then walking briskly or jogging 150 feet in response to a call for help, be able to help another officer separate two fighting inmates by approaching one of the inmates from behind, pulling the inmate away, and applying appropriate techniques to restrain the inmate for at least one minute.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

G. Task: Defend yourself against an inmate armed with a weapon, disarm and subdue the inmate.

Average Frequency: Less than once a year.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to handle an attacking inmate by verbally de-escalating the situation if possible and, when that is not possible, calling for assistance, retreating, or otherwise acting to minimize injury to self and others.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

H. Task: Search areas that are not easily accessible for contraband.

Average Frequency: Two to three times a month.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to repeatedly:

A. Assume position to look under a bed and visually search the area for contraband: and,
B. Step up on a chair and maintain balance while reaching to search high areas.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

I. Task: Carry heavy objects by yourself.

Average Frequency: Three to eleven times a year.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able to carry a wall mounted so pound airpack on your back and walk briskly 75 feet or more.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

J. Task: Lift and carry heavy objects with the help of another officer.

Average Frequency: Three to eleven times a year.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, be able, with the help of another officer, to lift and carry a 165 pound inmate on a stretcher for a distance of 75 feet or more.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

K. Task: Drag heavy objects.

Average Frequency: Three to eleven times a year.

Typical Minimum Standard: After walking/standing for 7 hours of an 8 hour shift, and walking briskly or jogging 75 feet, be able to apply appropriate technique to quickly drag a 165-pound inmate for a distance of 20 feet or more.

Any contraindicating factors? YES _____ NO _____
If "yes", please explain:

CHECKLIST FOR FITNESS TO PARTICIPATE IN THE PHYSICAL CONDITIONING PROGRAM

New corrections officers participate in a training program which includes a physical conditioning component to improve their ability to perform the physically demanding job tasks. The physical training program consists of 12 one-hour exercise sessions spaced evenly over a three to four week training period.

This checklist describes the major exercises involved in the physical conditioning program. Please review them and then indicate on the form whether the candidate's participation in any of these exercises may be contraindicated based on the medical examination results. If additional diagnostic procedures are required for this part of the examination, please perform them and add them to your list as the last page.

1. **Perform a series of 14 short duration (30-60 second) exercises enhancing flexibility, agility/coordination, and muscular strength, endurance, and power.**

    - **Exercises include: arm circles, side bends, windmills, trunk twists, calf stretches, quad stretches, knee hugs, stride stretches, stomach flutter kicks, knee to forehead, push-ups, sit-ups, side leg raises, and, vertical jumps.**
    - **Time allowed: 10 minutes.**
    - **No test.**

    Any contraindicated exercises? YES _____ NO _____

    If "yes", please identify and explain:

2. Perform a series of four short duration (30-60 second) exercises enhancing whole body agility/coordination plus grip, arm, and leg strength. Rest briefly (30-60 seconds) between exercises.

    - Exercises include: jump and duck, wrist curls, arm curls, and leg presses or modified wall sits.
    - Time allowed: 8 minutes.
    - No test.

    Any contraindicated exercises? YES _____ NO _____

    If "yes", please identify and explain:

3. Demonstrate/enhance ability to lift and carry, with a partner, a 165-pound weight on a stretcher for a distance of 75 feet or more.

- Exercise: Stretcher carries. With a partner, lift and carry a weighted stretcher as far as possible within 30 seconds. Rest briefly (30-60 seconds), then alternate stretcher carrying positions (front to back) and repeat.
- Time allowed: 2 minutes.
- Test. Benchmark minimum: Regardless of stretcher carrying position (whether carrying from the front or the rear), be able to assist in carrying the 165-pound weighted stretcher at least 75 feet.

Any contraindicating factors? YES _____ NO _____

If "yes", please identify and explain:

4. Demonstrate/enhance ability to quickly drag a 165 pound bag or dummy by the handle or strap for a distance of 20 feet or more over a carpeted or flat mowed grass surface.

- Exercise: Dummy drags. In 30 seconds, drag the weighted bag/dummy as far as possible, rest briefly (30-60 seconds), repeat.
- Time allowed: 2 minutes.
- Test. Benchmark minimum: In 30 seconds, drag the 165-pound bag or dummy at least 20 feet. (This corresponds to dragging the bag/dummy at a pace corresponding to a very slow walk).

Any contraindicating factors? YES _____ NO _____

If "yes", please identify and explain:

5. Demonstrate/enhance ability to walk briskly 75 feet or more while carrying a 30-pound airpack or weighted backpack.

   - Exercise: Airpack carries. Wearing a 30-pound airpack or weighted backpack, walk briskly back and forth through a 25-yard course as many times as possible within 30 seconds. Repeat as often as time allows, resting briefly (30-60 seconds) between repetitions.
   - Time allowed: 6 minutes.
   - Test. Benchmark minimum: Wearing the 30-pound airpack/backpack, walk a total distance of at least 75 feet (three 25-foot laps) within the 30 seconds. (This corresponds to a pace equivalent to at least a moderate walk.)

   Any contraindicating factors? YES _____ NO _____

   If "yes", please identify and explain:

6. Demonstrate/enhance ability to walk briskly or jog 150 feet through a course which includes climbing up and down a short flight of steps.

   - Exercise: Stair walks. Walk briskly or jog 15 yards, climb up and back down one flight of ten steps, and walk briskly or jog back to the starting point. Repeat. Rest briefly (30-60 seconds) between repetitions if benchmark minimum not met.
   - Time allowed: 6 minutes.
   - Test. Benchmark minimum. Complete the full course (15 yards to steps, 10 steps up and down, 15 yards back to starting point) within 30 seconds.

   Any contraindicating factors? YES _____ NO _____

   If "yes", please identify and explain:

7. Demonstrate/enhance speed in sprinting a distance of 50 yards on a straight track.

- Exercise: 50-yard sprints. From a standing start, run 50 yards as quickly as possible over a straight track. Repeat, resting briefly. (30-60 seconds) between repetitions, as often as time permits.
- Time allowed: 6 minutes.
- Test. Benchmark minimum: Complete the 50 yard sprint within 20 seconds (i.e., at a pace on the borderline between a fast jog and a slow run).

Any contraindicating factors? YES _____ NO _____

If "yes", please identify and explain:

8. Enhance cardiovascular endurance by walking briskly, jogging, or running around an oval track for a continuous period of 15 minutes.

- Exercise: long distance walk/jog
- Time allowed: 15 minutes.
- No test.

Any contraindicating factors? YES _____ NO _____

If "yes", please identify and explain:

9. Cool down: slow the heart rate down and stretch out the primary muscle groups.

- Exercises: walk at a comfortable pace for three minutes and then perform two minutes of stretching exercises (calf stretch, quad stretch, trunk twists, and windmills).
- Time allowed: 5 minutes.
- No test.

Any contraindicating factors? YES _____ NO _____

If "yes", please identify and explain:

DIAGNOSTIC PROCEDURES PERFORMED

Please record in the space below, or attach a complete list of the diagnostic procedures you have performed as a part of this medical screening examination.

COMMENTS

If you have any remaining comments to make concerning this candidate's physical/medical fitness for the corrections officer position, please note them here (attach extra pages as necessary).